

**THE EFFECTIVENESS OF USING VOCABRA GAMES IN
TEACHING VOCABULARY VIEWED FROM STUDENTS'
MOTIVATION**

(An Experimental Study at the Fifth Grade Students of SDIT Sabilul Huda
Cirebon in the Academic Year of 2018/2019)

THESIS



by:

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Submitted as a Partial Fulfillment of the Requirements for the Attainment of the
Graduate Degree in English Education

**ENGLISH EDUCATION DEPARTMENT
GRADUATE SCHOOL
FACULTY OF TEACHER TRAINING AND EDUCATION
SEBELAS MARET UNIVERSITY**

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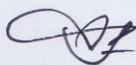
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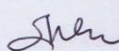
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LEGITIMATION

**THE EFFECTIVENESS OF USING VOCABRA GAMES IN
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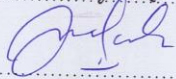
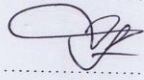
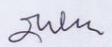
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PRONOUNCEMENT

This is to certify that I myself write this thesis entitled “**THE EFFECTIVENESS OF USING VOCABRA GAMES IN TEACHING VOCABULARY VIEWED FROM STUDENTS’ MOTIVATION** (An Experimental Study at the Fifth Grade Students of SDIT Sabilul Huda Cirebon in the Academic Year of 2018/2019)”. It is not a product of plagiarism or made by others. Anything related to others’ works is written in quotation, the sources of which are listed on the list of references.

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Surakarta, January 21st, 2019



Septian Sudrajat

MOTTO

“Maa fii Qalbi Ghairullah,
...there is nothing other except ALLOH”
QS: An-Nuur, p. 58-60

“Family is everything”
Septian Sudrajat

DEDICATION

This thesis is whole-heartedly dedicated to those who support me and keep me struggling to get better future:

- My beloved wife, Nurlinda Rosdianah
- My handsome son, Ar Vinzy Aflah Sudrajat
- My next gen...
- My perfect Daddy and Mommy
- My spirit Daddy in Law and Mom in Law
- My inspired sister and her husband
- My cheerful sister in law
- My two cute nephews

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All praise and honor be to Allah, The Almighty, with Him there is nothing impossible. May peace and blessings of Allah be upon Prophet Muhammad, His last Messenger, the noblest man who taught mankind to never lose hope. The Journey of this thesis accomplishment would absolutely never be easy without His blessings and the researcher would like to thank:

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2. Dr. Ngadiso, M.Pd., the Head of English Department of Teacher Training Education Faculty and as the first consultant, for his advice.
3. Dra. Dewi Rochsantiningsih, M. Ed., Ph.D., as the second consultant, who have given guidance to the best result of the thesis.
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6. The fifth grade students of SDIT Sabilul Huda Cirebon who have participated well during the research.
7. His friends in English Department of year 2016.

The writer realizes that there are still many shortcomings in this thesis. Therefore, he welcomes objective criticism and constructive suggestion for this work. Finally, he hopes that this thesis is useful not only for him but also for the readers.

Surakarta, January , 2019

Septian Sudrajat

ABSTRACT

Septian Sudrajat S891608016, 2018. *The Effectiveness of Using Vocabra Games in Teaching Vocabulary Viewed from Students' Motivation (An Experimental Study at the Fifth Grade Students of SDIT Sabilul Huda Cirebon in the Academic Year of 2018/2019)*. The First Consultant: Dr. Ngadiso, M.Pd.; The Second Consultant: Dra. Dewi Rochsantiningsih, M. Ed., Ph.D. Thesis. English Education Department, Graduate School of Sebelas Maret University.

The objectives of the study are: (1) to identify whether Vocabra Game is more effective than Crossword Game in teaching vocabulary to the fifth grade students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019; (2) to identify whether the students who have high motivation have better vocabulary mastery than those who have low motivation; and (3) to identify whether there is an interaction between teaching media and students' motivation in teaching vocabulary to the fifth grade students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

This research method was experimental. This research was carried out at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019. The population was 56 fifth grade students. The researcher used cluster random sampling. To take the sample, the researcher used lottery. The sample of this research was class Turkey 28 students as experimental class and Habasyah 28 students as control class. Two instruments are used in this study, they are questionnaire on motivation to collect data about students' motivation and vocabulary test to measure students' vocabulary mastery. The instruments have been tried out to check the questionnaire and the vocabulary test validity and reliability. After the treatment has been applied for eight meetings, Post-test is conducted to obtain vocabulary mastery scores. Then descriptive and inferential data analysis were conducted to give description of the data and to test the hypothesis. Normality and Homogeneity were tested before using Anova. Finally, Anova is used to test the hypothesis.

The research result of this study reveals that: (1) Vocabra Game is more effective than Crossword Game in teaching vocabulary; (2) The students having high motivation have better vocabulary mastery than the students having low motivation; and (3) there is an interaction between teaching media and students' motivation in teaching vocabulary.

Finally, the research findings imply that the use of Vocabra Game is able to influence the students' vocabulary. Therefore, it is recommended that English Teacher to apply Vocabra Game in teaching vocabulary.

Keyword: Teaching Vocabulary, Vocabra Game, Crossword Game, Motivation.

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CHAPTER I

INTRODUCTION

This chapter presents background of the study, problem identification, limitation of the study, problem statements, objectives of the study, and significance of the study.

A. Background of the Study

English vocabulary as one of the language skill elements has an important role for young learners in learning foreign language. It also means that teaching speaking, listening, reading, and writing cannot be separated from teaching vocabulary. Vocabulary is one of language competence, which enhances the skill in language. Richard (2005, p. 5) says that vocabulary is core component of listening, reading, speaking and writing. Vocabulary is very important aspects to be learnt by the students who want to master a language such as pronouncing, spelling, meaning, grammar, translating and using words. In acquiring a language, vocabulary, as one of the knowledge areas in language, plays a great role for young learners (Cameron, 2001). Linse (2005) states that young learners' vocabulary development is an important aspect of their language development. However, young learners have lack amount and type of exposures to English. Their experience of the language outside the classroom is very little (Cameron, 2001).

Teaching English for young learners is very much different from teaching adults. The teaching in the classroom must engage both imagination and motivation for young learner. According to Hadfield in Fauziati (2010, p. 92) elementary school students are children who still like playing, so the teacher is expected to be imaginative and motivated in developing their teaching strategy to make their English lesson more exciting.

The teaching concept of this research uses game in teaching vocabulary for students' motivation. According to Hadfield (2001, p. 4) "*A game is an activity with rules, a goal and an element of fun.*" So, the writer concludes that a

game is the activity that has some component rules to play and the purpose is to make the player fun. Games are fun and children like to play them. Playing games are a vital and natural part of growing up and learning. Through games children are able to experiment, discover, and interact with their environment.

In using game, there is a gamification in teaching vocabulary for students' motivation. Zicherman (2012) says that gamification is which can be defined as "using game thinking and game mechanics to solve the problems". In a gamification, the researcher used vocabra game in teaching media as a game thinking and direct instruction as a game mechanics. Gamification is chosen when using language in a day to day setting, the young learner is receiving input how to get the meaning, pronouncing, spelling and using words. Because the English young learner can study vocabulary step by step delivered from the teacher class, so they need to have direct instruction. Arends (2008) says that direct instruction was specifically designed to promote student learning of procedural knowledge and declarative that is well structured and can be taught in a step-by-step fashion.

The researcher focused on students' vocabulary mastery at the fifth grade of SDIT Sabilul Huda Cirebon. Interview with the Principal of SDIT Sabilul Huda, Yusuf, S.Pd.I and The English Teacher of SDIT Sabilul Huda, Abdul Kodir, S.S. revealed that the students of SDIT Sabilul Huda Cirebon have sufficient vocabulary mastery to be able to mention, remember, say, and write words rightly even though they do not know the meaning. From that case the writer applies vocabra games in teaching English to young learners and make them acquired about new words curiously. Through Vocabra Game as a teaching media, it can help the teacher to teach English vocabulary to the students. The writer was interested in conducting a research dealing with the effectiveness of using vocabra games in teaching vocabulary to young learners that they can not only mention, remember, say, and write words rightly as usual, but also practice more in a daily activity that is so simple like in a daily work book, magazine or other daily sources. Vocabra game is a game as teaching media. Vocabra game means abracadabra vocabulary. Abra Vocabra game is a teaching media that

should be based on common words, not obscure words that students will encounter only once or twice in a lifetime (Rider, 2003, p. 5). Therefore, the writer was interested in Using Vocabra Game as a teaching media at the fifth grade of SDIT Sabilul Huda Cirebon. Abra Vocabra takes a practical media to vocabulary mastery. The words in Abra Vocabra or vocabra game are real-world words, words that anyone is likely to read in a daily work book (LKS), newspaper, hear on the news, read in a magazine (Rider, 2003).

The other factor of the students is motivation. It is one of the factors which influence the process of teaching and learning. Elliot, et al. (2000, p. 332) propose that motivation can increase an individual's energy and activity level, lead the individual toward the specific goal, offer initiation of a certain activities and influence the learning strategies and cognitive process and individual employment. In this case, the motivation plays crucial role in the success of teaching and learning process. Therefore, the students who have motivation tend to achieve learning objectives easily in the learning process.

In acquiring new words, English young learners will be motivated and interested to learn vocabulary with the situation of fun and enjoyable using game. Liu et al. (2010) says that using games has higher scores in every field, further strengthening the claim that has been made before between the use of games and increased motivation. Shaw (2010) postulated that games might have been a factor in acquiring and retaining vocabulary, he added that the use of games would be an enjoyable and motivating way to engage students and increase their desire to develop their vocabulary knowledge. The trend of vocabulary learning through gaming could be strengthened (Vardanjani, 2014).

Based on the description above, it can be concluded that teacher should create the suitable, the most powerful, and motivating media in encouraging and building their strategies and abilities in learning activity so that motivation can increase an individual's energy and activity level.

B. Problem Identification

The researcher identifies the problem as follows:

1. Why is learning vocabulary difficult for the fifth grade student of ten years old of SDIT Sabilul Huda Cirebon?
2. Which media is suitable for the fifth year students of SDIT Sabilul Huda Cirebon who have low motivation and high motivation?
3. How can English Vocabra Game help the fifth grade student of ten years old of SDIT Sabilul Huda Cirebon in learning vocabulary?
4. How can English Crossword Game help the fifth grade student of ten years old of SDIT Sabilul Huda Cirebon in learning vocabulary?

C. Limitation of the study

Questions arisen from problem identifications will be limited to the problems which are supposed to influence students' vocabulary, they are teaching media (Vocabra Game and Crossword Game) and students' motivation.

D. Problem Statement

In this research the writer focuses on these problems below:

1. Is the use of Vocabra Game more effective than Crossword Game in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon?
2. Do the students having high motivation have better vocabulary mastery than those having low motivation?
3. Is there an interaction between teaching media and students' motivation in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon?

E. Objectives of the Study

In the line with the research problems, the objectives of the study are to reveal:

1. Whether English Vocabra Game is more effective than Crossword Game in teaching vocabulary to the fifth grade students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

2. Whether the students having high motivation have better vocabulary mastery than those having low motivation.
3. Whether there is an interaction between teaching media and students' motivation in teaching vocabulary to the fifth grade students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

F. Significance of the Study

This study is targeted to investigate the effectiveness of English Vocabra Game and Crossword Game media in teaching vocabulary. If such analysis proves to have significant role on the level of the students' vocabulary mastery, the research findings are expected to provide additional references to those who are concerned with the teaching vocabulary at the elementary school.

1. To the Teacher

First, this research may empower the teacher's knowledge on how to apply the kinds of media in teaching vocabulary, so it will help the teacher to create an interesting teaching-learning process in the classroom. The teacher can use appropriate media for teaching learning activities to the students who have high and low motivation. Second, this research can provide an illustration of preparing and experiencing a successful foreign language vocabulary mastery (as the alternative for the teacher's media in teaching vocabulary).

2. To the Students

The result of the study is also expected to help and be beneficial for the students in finding out the effective way to solve their difficulty in learning new words curiously. Second, this research will help them to have a high motivation in learning vocabulary.

3. To the Other Researcher

First, this research will provide an overview of an effective media in vocabulary mastery. Second, the result of this research can be used as a reference and guidance in conducting a research in the future.

CHAPTER II

LITERATURE REVIEW

This chapter emphasizes the theoretical foundation related to the study. It includes some definitions of vocabulary, aspects of vocabulary, teaching English to and development of young learners, some definitions of vocabra games and crossword games, previous study, rationale, and hypothesis related to the study.

A. Vocabulary

1. The Definitions of Vocabulary

According to Cameron (2001, p. 71) vocabulary for young learners in teaching and learning is central to the learning of acquiring new words of a foreign language at primary level. Rubin (1999, p. 91) vocabulary is how the English young learner understanding new words what they see, read, and learn. Sarah (1993) vocabulary when English young learner gets new words by their experience in the situation of enjoyable. Nation (2008, p. 30) states that the learner needs to know of the “words”. It means that students need to know the words not only the meaning but also the spelling, pronouncing, and the usage of words.

Based on the explanations above, it can be concluded that vocabulary is central to acquire new words what the English young learners as a foreign language at primary level see, read, and learn in the situation of enjoyable that must be understood in order to construct new sentences or words covering its meaning, pronunciation, spelling, and using word.

2. Aspects of Vocabulary Mastery

Brewster et al., 2002, pp. 85-91 say that vocabulary aspects in mastering vocabulary, as follows:

- 1) Pronunciation,
- 2) Meaning the words,

- 3) Using words,
- 4) Spelling,
- 5) Attending to form.

Notion (2001, p. 102) summarizes several aspects of vocabulary, as follows:

- 1) The meaning words are denotation,
- 2) The precise, and
- 3) Literal definition of a word.

According to Thornbury (2002, p. 15) the aspects of vocabulary are:

- 1) knowing the meaning of a word,
- 2) Connotations,
- 3) Registers, and
- 4) Cultural accretions.

Harmer (1991, p. 158) summarizes some aspects of vocabulary, as follows:

- 1) Meaning,
- 2) Word use,
- 3) Word formation, and
- 4) Word grammar.

According to Ur (1996, pp. 60-62) there are some aspects of vocabulary that should be taught or mastered by students in learning foreign language, as follow:

- 1) Form: pronunciation and spelling

The learner has to know what a word sounds like (its pronunciation) and what it looks like (its spelling). These are fairly obvious characteristics, and one of them will be preserved by the learner when encountering the item for the first time. In teaching, teachers need to make sure that these aspects are accurately presented and learned.

2) Grammar

The grammar of new item will be necessary to be taught if this is not obviously covered by general grammatical rules. An item may have an unpredictable change of form in certain grammatical contexts that may have some idiosyncratic speech of connecting with other words in sentences; it is important to provide learners with this information at the same time as teachers teach in a basic form. When the teacher teaches about a new verb, for example, teacher must give also its past form, if it is irregular. Similarly, when the teacher teaches noun, teacher may wish to present its plural form, if it is irregular.

3) Aspect of meaning (1): denotation, connotation, appropriateness

The meaning of a word is primarily which refers to in the real word, its denotation; this is often the sort of definition that is given in a dictionary. For example, dog denotes a kind of animal; more specifically, a common, domestic carnivorous mammal. A less obvious component of the meaning of an item is its connotation: the association, or positive or negative feeling, it evokes, which may or may not be indicated in a dictionary definition. The word dog, for example, as understood by most British people, has positive connotations of friendship and loyalty. A more subtle aspect of meaning often needs to be taught is whether a particular item is the appropriate one to use in a certain context or not. For example, learners may know that weep is virtually synonym in denotation, but it is more formal, tends to be used in writing more than in speech, and generally has less common.

4) Aspect of meaning (2): meaning relationship

How the meaning of one item relates to the meaning of others can also be useful in teaching. There are various aspects such relationships, as follows:

a. Synonyms: item that mean the same, or nearly the same; for example, bright, clever, smart, may serve as synonym of intelligent.

- b. Antonyms: items that mean the opposite; rich is an antonym of poor.
- c. Hyponyms: items that serve as specific examples of general concepts; dog, lion, mouse, are hyponyms of animal.
- d. Co-hyponyms or co-ordinates: other items that are the same kind of thing; red, blue, green, and brown are co-ordinates.
- e. Super ordinates: general concepts that cover specific items; animal is the superordinate of dog, lion, mouse.
- f. Translation: words or expressions in the learners for example mother tongue that are more or less equivalent meaning to the item being taught.

5) Word Formation

One word or multi-word, vocabulary item can often be broken down into small component or “bits”. Exactly how these bits are put together is another piece of useful information-perhaps mainly for more advanced learners. The teacher may wish to teach the common prefixes and suffixes: for example, if learners know the meaning of sub-, un- and -able, this will help them guess the meaning of words like substandard, ungrateful and untranslatable. Another way vocabulary items are built is by combining two words (two nouns, or gerund and noun, or a noun and verb) to make one item. For example: bookcase, follow-up, swimming pool.

Kamil & Hiebert (2009, p. 4) define two aspects of vocabulary, as follows:

- 1) Knowledge of words
- 2) Word meanings.

John (2000, p. 16) states the aspect of vocabulary is knowing the meanings of words.

Jackson and Amvela (2000, p. 11) state some aspects of vocabulary, as follows:

- 1) How to use the word,
- 2) Meaning, and
- 3) Word grammar.

Richards and Schmidt (2002, p. 580) summarize some vocabulary aspects, as follows:

- 1) Using words,
- 2) Meaning, and
- 3) Grammar.

So, it can be concluded that vocabulary mastery is the very basic knowledge to learn more about English especially for young learners, vocabulary is central and important to language learning. It cannot be separated from the other language elements in the teaching and learning process because it influences the students' ability in learning English.

The researcher focuses on vocabulary teaching media used for elementary students. This media is used in order to have a competence in understanding, expressing, and retelling the instruction and simple information whether in the form of action or language in the context of surrounding the learners.

Finally, it can be concluded that the aspects of vocabulary are a list of target language words and their spelling and pronunciation, meaning including single words, compound words, and idioms, and translation. Based on research objective, the researcher takes (1) Meaning; (2) Pronunciation; (3) Spelling; and (4) The use of words as the indicators for teaching vocabulary using vocabra games. The indicators that are going to be measured from the aspect of meaning are: giving the meaning of word, stating the meaning of word, and labeling the picture based on the expression given. The indicator from the pronunciation aspect is asking the students to pronounce, while the indicator from the spelling aspect is asking the students to arrange letters into a word

from jumble letters. The indicators that are going to be measured from the last aspect is the use of words are: using words to make simple sentences.

3. Teaching Technique of Vocabulary

In this research, the researcher uses direct instruction technique to teach vocabulary using games for vocabra game and crossword game.

1. The Definition of Direct Instruction

Direct Instruction characterized by teacher-centered and teacher-dominated classroom (Peterson, 1999, p. 231). Because direct instruction is widely used by teachers, the predominant use of direct instruction technique needs to be evaluated, and educators need to recognize the limitation of these methods for developing the abilities, processes, and attitudes required for critical thinking, and for interpersonal or group learning. Students' understanding of affective and higher level cognitive objectives may require the use of instructional techniques associated with other strategies. In this model the teacher becomes the decision maker. The teacher's control occurs when the teacher selects and directs the learning tasks

Direct Instruction is specifically designed to promote student learning of procedural knowledge and declarative knowledge that can be taught in step-by-step fashion (Arends, 1998, p. 66). Direct instruction is usually deductive. That is, the rule or generalization is presented and then illustrated with examples. While this strategy may be considered among the easier to plan and to use, it is clear that effective direct instruction is often more complex than it would first appear. Joyce and Weil (1986, p. 326) say that the teacher also provides feedback and correction for the students' mistake. Direct instructional model is one of the highest priorities on the assignment and complexion of academic tasks in the classroom. Direct Instruction is one of which there is a predominant focus on learning and in which students are engaged in academic tasks, a large percentage of time and achieve at a high rate of success (Bruce, et al., (2002, p. 338). Direct

instructional is similar to traditional teaching. Generally vocabulary traditional teaching is directed toward teaching academic content.

Hansen and Eller (1999, p. 309) summarize that direct instruction includes frequent lesson where the teacher presents information and develop concept through demonstration and lectures, most of the lectures involve questioning students and providing feedback. When students respond the teachers' questions, the teachers provide appropriate feedback.

Based on explanation above, direct instruction is teacher-centered technique that includes frequent lesson where the teacher presents information and develops concept through demonstration and lecture which are focused on utilizing systematic and explicit instruction by providing feedback and correction of students' mistake to engage them in successful academic task. Moreover, direct instruction is specifically designed to promote student learning of procedural knowledge and declarative knowledge.

2. The Procedures of Direct Instruction

According to Ur (1996, pp. 11-12), there are several steps in teaching vocabulary.

1) Presenting new vocabulary

In this step, the teacher should select some vocabularies that will be taught to the learners in accordance with the topic and level of the students. Think how the meaning of these items would best be presented to the learners who are encountering it for the first time.

2) Memorizing Vocabulary

There are various reasons why we can remember some words better than others. They are the nature of the words themselves, under what circumstances they are learnt and the method of teaching. Therefore, the

teacher should create an interest in teaching and learning vocabulary so that the students can remember and understand the vocabulary easily.

3) Testing Vocabulary

To know and measure the understanding of the learners or the students about the material, which have been taught, the teacher can do a testing or assessment. Matching, picture labeling, and filling a blank in a sentence are the examples of testing vocabulary.

Cross (1996, pp. 63-73) states that there are four steps in presenting new vocabulary to the learners, as follows:

1) Step one: sound and meaning

Say the word two or three times, pronounce it clearly, then give the meaning of the word.

2) Step two: repetition

Get the class to repeat the new word a few times. Check the pronunciation carefully.

3) Step three: written form

Write the word on the blackboard and have the class read it aloud, without distorting the pronunciation.

4) Step four: illustrative sentence

Put a short illustrative sentence in board so that the meaning will be clear.

So, based on several teaching steps of vocabulary using game above, the writer constructs several steps for teaching vocabulary through vocabra game, crossword game, and developing all indicators of vocabulary:

1) Explain vocabra game or crossword game to the students.

It provides a description, explanation, or example of vocabra game or crossword game. First, a teacher should provide students with information about the meaning of vocabra game or crossword game. There are a number of different ways that teachers can also help students build their initial understanding of the vocabra game or crossword game meaning. Teachers can tell a story using the term, drawing, use video or computer images as a source of information, use current events to connect the term to something familiar, describe their own mental pictures of the term, find or create pictures that exemplify the term. It will help students how to pronounce the word during the teacher tells that story and of course how to spell the letter by some certain words.

2) Sound, meaning, and repetition for memorizing and testing.

In this step, the teacher can say the word two or three times, pronounce and spell it clearly, then give the meaning of the word. There are some media in vocabra game to study the meaning, spelling, and pronouncing, such as: oral stories, acting out meanings, dialogues, drawings, categories, a novel approach, sell it, newspaper captions, etc. Or crossword game to study the meaning, spelling, and pronouncing, such as: filling the square for across and down. In this part, the students are able to spell and pronounce the words and get the meaning of the words.

3) Written form for testing in the word

In this step, the teacher can ask student to use the word in a sentence or arrange the word to be a correct sentence. In the types of vocabra game, the students can apply dialogues or vocabulary bee. In this part, the students are able to study how to use the words. In crossword game, the students are able to use the words based on the answers before by guiding from the teacher.

3. The Advantages and Disadvantages of Direct Instruction

The advantages of direct instruction in (Academy journal, 2002) are as follows:

- a. Exposing students to high-quality oral language.
- b. Promoting word consciousness.
- c. Teaching word meaning directly.
- d. Teaching independent word-learning strategies, including the use of context clues, the use of word parts, and the efficient use of the dictionary.

The disadvantages of direct instruction in (Dr. Bob Kizli's article, 2012) are as follows:

- a. It can stifle teacher creativity.
- b. It requires well-organized content preparation and good oral communication skills.
- c. The steps must be followed in prescribed order.
- d. It may not be effective for higher-order thinking skills, depending on the knowledge base and skill of the teacher.

4. Teaching English to Young Learners and Development of Young Learners

1. Teaching English to Young Learners

There are some reasons that make the researcher conducts Vocabra Game to young learner in teaching vocabulary, one of the reason is second language acquisition. In second language acquisition, age is one of factors which may affect the approximate system of the second language learner. The child's memory span increases with age. The child acquires a greater number of abstract concepts and uses these ones to interpret his experiences. Some investigators suggest that a critical period theory must predict to the children are better than adults in learning second languages, as well as first languages. Lenneberg (in Brown, 1995, p. 77) states that language acquisition must occur before the onset of puberty is reached so that the language is able to develop fully. His argument contains two parts. First, he reviews available behavioral evidence suggests that normal language

learning occurs primarily or exclusively within childhood. His review includes various types of indirect evidence, for example, the differences in recovery from aphasia for children versus adults, and the differences in progress of language acquisition, before they versus after puberty. Second, he proposes a mechanism which might be responsible for a maturational change in learning abilities. The proposed mechanism was fundamentally neurological in nature. He suggests that the brain has been reached its adult values by puberty, has lost plasticity and reorganizational capacities. It is necessary for acquiring language.

The other reason is a game which has the potential to address many of the limitations of the traditional class-room education. They accommodate more complex to learning process and outcome, allow for interactivity, promote collaboration, peer learning, and foster active learning. Outside the classroom, playing is one of the fundamental human activities so that the children can develop together with talking, toddling, and relating to others (Miller, 2008:3). Games help and encourage many learners to sustain their interest and work. Games also help the teacher to create in which the language is useful and the learners want to take part and in order to do so must understand what others are acquiring new words.

For further statement in general, children have great immediate need to be motivated by the teacher, media or the materials in order to learn effectively. Prizes and similar extrinsic rewards can help, but the most important elements is to contribute towards intrinsic motivation: interest in doing the learning activity itself. The three very important sources of interest for children in the classroom are pictures, stories, and games; the first being obviously is visual stimulus; the second both visual and aural; and the third using both visual and aural channels as well as activating language production and sometimes physical movement. Hatch and Brown (1995, p. 373) mention that the first essential step for vocabulary learning is encountering new words that is having a source for words. The students' strategies here include learning new words by reading books, listening to

radio, watching TV and reading newspapers and magazines. When students have seen an object or an action, they desire to know the label (word) so that it may increase, when the word is encountered, it is learned very quickly. This appears to be the case in Brown's study where learners were using an interactive version of Raiders of the Lost Ark. Learners had seen some objects or actions in the video so they had a visual image but they did not hear or see the vocabulary items until later. These vocabulary items were learned significantly faster than other words in the script or exercises.

It can be concluded based on the description above that young learners are better learners in such kind of learning environment. It will be successful if the teacher not only raises children's motivation and creates enthusiasm but also arranges and gives suitable media in order to improve their vocabulary mastery. Learning games engage students and then motivate them to interact with the topic. This interaction drives players to demonstrate their understanding of the topic in a friendly competition against themselves, other players, the time, and scoring standards. Moreover, during this play, players practice the social skills of communication, collaboration, and following instructions, as well as cognitive skills such as problem solving and critical thinking. So, the most appropriate teaching media is a game which may provide English vocabulary learning and makes the young learners fun, comfortable, and addicted to practice alone or in the class room activity.

2. Problems to Teach English for Children

In language use for teaching vocabulary, children have difficulties while they are learning vocabulary in a foreign language. Problems in teaching English for children may arise because of two important factors. The first factor is learning new word in English as a foreign language is still new for them, it also brings many differences in spelling, pronunciation, meaning, and how to use the words that make the students get bored to practice those things. They need a lot of repetitions or drillings in order to

learn spelling, pronunciation, meaning, and the usage of words. They still need to translate in understanding any instruction in English for physical response or gesture is needed to make instruction more understandable. The second factor is the time of teaching English is very limited, it could be only 45 minutes until 60 minutes. They lack practicing this language because of limited time in learning vocabulary.

So, it can be concluded that the children still have a problem in learning new word in English, the teacher has to give a lot of repetitions and drillings in order to learn spelling, pronunciation, meaning, and how to use the word, that's why the students feels excited to know the new word understandably. The time also can cause why the students cannot study vocabulary maximum.

3. The Development of Young Learners

a. Cognitive development

Piaget (in Woolfolk, 1995, p. 33) states that a child has four stages of cognitive development as follows:

1) Sensorimotor 0-2 years

This stage has some characteristics such as it begins to make use of imitation, memory, and thought; it also begins to recognize that objects. They do not ease to exist when they are hidden. It moves from unconscious actions to goal-directed activity.

2) Preoperational 2-7 years

It gradually develops language use and ability to think in symbolic form. In this stage of age children are able to think operations logically in one direction; it also has difficulties seeing another person's point of view.

3) Concrete operational 7-11 years

Most children are able to solve concrete (hands-on) problems in logical fashion, understand laws of conversation, and classify. They also understand it correctly.

4) Formal operational 11-adult

In this stage, they are able to solve abstract problems in logical fashion. They become more scientific in thinking and develop concerns about social issues. Before they learn to speak, children communicate through crying, smiling, and body movement. By the end of the first year, more or less, most children have their first word. They have entered what psychologists call the one word stage.

b. Affective development

According to Brown (2004, p. 143) affective development refers to emotion or feeling. The affective domain is in the emotional side of human behavior, and it may be just posed to the cognitive side. The development of affective states both feelings themselves which come into contact and feelings involve a variety of personality factors. The affective domain includes many factors: self-esteem, extroversion, inhibition, risk-taking imitation, anxiety attitudes, empathy (Brown, 2000, p. 145).

c. Psychomotor development

Bloom also classifies psychomotor categories as follows: (1) Imitation: watching and copying the action of another; (2) Manipulation: performing a task from written or verbal instructions; (3) Precision: adeptly performing a task without outside help or instruction, showing ability to demonstrate skill to others; (4) Articulation: combining skills to meet new, unforeseen demands; (5) Naturalization: using internalized knowledge to perform tasks in a second nature way.

From the explanation above, it can be concluded that children have stages in developing cognitive based on their age. The development of

affective states both feelings themselves which come into contact and feelings involve a variety of personality factors. Psychomotor categories will influence in psychomotor development for children.

4. The Language Development of Children

a. Pronunciation

The majority of first graders have mastered most of the sound of mother tongue, but a few sounds may be unconquered. The v, th, and zh sounds are the last to develop. About 10 percent of 8 years old still have some trouble with s, z, th, and zh (Rathus in Woolfolk, 1995, p. 55). Young children may understand and be able to use many words but they prefer using words what they can pronounce words easily. Intonation or word emphasis may also become problems for young children. If the meaning of a sentence is ambiguous and intonation, it will make the difference, then the children as old as age of 8 or 9 may misunderstand.

b. Syntax

Children must master the basic word orders, or syntax, in their native language early. By early elementary school, many children can understand the meaning of passive sentences, yet they do not use such constructions in their normal conversations. Other accomplishments during elementary school include first understanding and use complex grammatical structures such as extra clauses, qualifies, and conjunctions.

c. Vocabulary and meaning

Between the age of 2 and 6, the average child learns between six and ten words a day. This means the average 6 years old has a vocabulary of 8.000 to 14.000 words. From ages 9 to 11, about 5.000 new words are added to this repertoire. It seems that the time before puberty is a sensitive period for the language growth. Research has shown that learners can learn much about language after puberty, but that is very

positive or negative condition during period before puberty can greatly help or hinder language development (Berger, Johnson and Newport in Woolfolk, 1995, p. 57).

In the early elementary years, some children may have trouble with abstract words. They may also take statements literally and thus misunderstand sarcasm or metaphor. Many children are in their preadolescents' years before they are able to distinguish being a kid from being taunted or before they know that a sarcastic remark is not to be taken literally (Gardner in Woolfolk, 1995, p. 57).

d. Pragmatics

Pragmatics involves the appropriate use of language to communicate. In pronunciation development section, it shows the difficult sounds that they face when they learn or acquire the language. The difficulty is pronouncing a word.

A student sometimes misses to pronounce a word although he has mastered that phonemes and sequences involved. The actual fact of the pronunciation difficulty problem is not one of mastering the sound system but it is simply a matter of mental in acquiring language.

Based on the explanation above, some stages in cognitive development and the process of language acquisition are very important to develop their language ability. It can be said that the characteristics of young learners are focusing on the use of language and ability to think in symbolic form, thinking process through logic in one direction, having difficulties even though there is no related utterance between them.

B. Vocabra Game

1. The Definition of Vocabra Game

Rider (2003) says that Vocabra Game is real-world words, words that anyone is likely to read in a newspaper, hear on the news, read in a magazine. In fact, just seeing and hearing the words outside the classroom reinforces for

students the idea that the words are useful and important ones to know. Hadfield (1999) summarizes that Vocabra Game is memorizing, personalizing, and communicating vocabulary games which become a set of new words to integrate them into our existing word store easily based on in a daily activity. Samston (2001) says that Vocabra Game is helping students improve their vocabulary as a relatively easy project for the classroom and one that reaps results almost immediately where this teaching media powerfully makes the students easy, interesting, practical and enjoyable in vocabulary mastery. Benham as cited in Rider (2003) summarizes that Vocabra Game is helping the students to improve their vocabulary that's why they feel smarter and powerful to find themselves understanding more of what they read and what they hear. Larson as cited in Rider (2003) says that Vocabra Game is the process to know the new word not only spelling but also explaining the position, because it should be based on the common words, not obscure words that the students will encounter only once or twice in a lifetime.

Extracting from the definitions above, it can be concluded that Abra Vocabra Game or Vocabra Game is the process of memorizing, personalizing, and communicating vocabulary games which become a set of new words to integrate them into our existing word store by real-world words, words that anyone is likely to read in a newspaper, hear on the news, read in a magazine.

2. The Classroom Activities of Vocabra Game

Classroom activities for abra vocabra in teaching vocabulary according to Rider (2003, p. 13) is presented below.

a. Drawing

The class as a whole then tries to guess which vocabulary word is illustrated by each picture. Besides the students are able to know the meaning, they can repeat how to pronounce and spell that word by teacher's repetition. Then the students may have the imagination to use about related word that they answer.

b. Vocabulary Bee

The students can acquire new word by a vocabulary bee, conducted somewhat like a spelling bee. In a vocabulary bee, the class is divided into two teams. Unlike a spelling bee, however, students aren't eliminated from the game when they miss a word. Because students will probably know most of the words, it's a good idea to add question "levels," to make the game more interesting. Let each student to select one, two or three point question. For one-point question, students simply define the word correctly, and they can earn their team a point. Then ask students to repeat that word for pronunciation and spelling by the teacher. For two-point questions, they must define the word correctly and use it in a sentence. Three point questions require the student to define two words correctly and use both in one sentence that indicates their meaning. To get the students' ability to spell the words correctly, the teacher can give the jumbled letter. It can be the simple media to make the students understand how to spell the letter based on arrangement the letter.

c. Categories

The teacher gives students some simple media such as sentences or pictures to match, so the students can get the meaning. This exercise really requires high motivation and a strong understanding of the words. It is an excellent activity for review.

d. Selling It

The teacher can asks the students to match the word with some pictures about some activities based on the topic, the word "selling it" means that the teacher sells the words to the students and the students will buy those words. So the student can study the meaning. Then the teacher can ask students to repeat those words by teacher's repetition to study pronunciation and spelling. Finally, the teacher can know how far the students understand the meaning words by asking them to use them in a sentence.

e. Dialogue

The teacher asks students to find the meaning in the bracket. The teacher also can ask them to write a short two or three-person dialogue (conversation) using all the words on the vocabulary list. Or ask them to design a short comic strip that includes all the words on the vocabulary list. As a usual simple media, the teacher can serve at least three words with three sentence randomly. Then the teacher asks the students to match them. After they know about the meaning, the teacher asks students to repeat those words to study the pronunciation and spelling. To encourage the students to study vocabulary, the teacher can use jumble words to make the students understand how to use the words to be a correct sentence.

3. The Teaching Steps of Vocabra Game

The writer uses direct instruction to teach vocabulary and constructs several steps based on the explanation of teaching technique through vocabra games and developing all indicators of vocabulary:

1) Explain vocabra game to the students.

It provides a description, explanation, or example of vocabra game. First, a teacher should provide students with information about the meaning of vocabra game. There are a number of different ways that teachers can also help students build their initial understanding of the vocabra game meaning or even types. Teachers can tell a story using the term, drawing, use video or computer images as a source of information, use current events to connect the term to something familiar, describe their own mental pictures of the term, find or create pictures that exemplify the term. It will help students how to pronounce the word during the teacher tells that story and of course how to spell the letter by some certain words.

2) Sound, meaning, and repetition for memorizing and testing

In this step, the teacher can say the word two or three times, pronounce and spell it clearly, then give the meaning of the word. There are some media in vocabra games to study the meaning, spelling, and pronouncing, such as: oral stories, acting out meanings, dialogues, drawings, categories, a novel

approach, sell it, newspaper captions, etc. In this part, the students are able to spell and pronounce the words and get the meaning of the words.

3) Written form for testing in the word

In this step, the teacher can ask student to use the word in a sentence or arrange the word to be a correct sentence. In the types of vocabra game, the students can apply dialogues or oral stories. In this part, the students are able to study how to use the words.

4. The Advantages of Vocabra Game in Teaching Vocabulary

According to Rider (2003, p. 10) there are some advantages of vocabra game in teaching vocabulary:

1. The students feel so confident to acquire new words by various Vocabra Game types in learning vocabulary.
2. The teacher can encourage the students to choose various types of vocabra game. It makes the teaching and learning process in vocabulary mastery easy to acquire new words for students
3. The students start becoming aware to acquire new words, because in teaching and learning vocabulary, the students do not realize that to study vocabulary is available around living, such as drawings, dialogues, writing poetry or newspaper captions.
4. The students are so excited. Vocabulary study has become such a positive thing in the classroom. Vocabulary study has been successful when the students start defining new vocabulary words with vocabulary. The students are free to use their imagination in learning vocabulary, for example using a novel approach or writing a poem.
5. The students get a chance to do well, and make them smiling to use the various vocabra games.

5. The Disadvantages of Vocabra Game in Teaching Vocabulary

According to Rider (2003, p. 9) the disadvantages of vocabra game is how to acquire new words for the young learner is easy way by looking for the meaning from the dictionary in teaching and learning process, especially from electric dictionary on cell phone. It means that using a kind of dictionary is the great way to find meaning than using other media, such as vocabra game. The students are more dissatisfied to use more types of teaching media to learn and study vocabulary.

C. Cross Word Games

1. The Definition of Crossword Game

Jones (1993, p. 5) states that crossword is a vocabulary game which will stimulate and encourage teachers to devise their own activities based on their ideas. Learning seems to become more active, the students get more involved and retention improves enormously. A crossword is a word puzzle that normally takes the form of a square or rectangular grid of white and shaded squares. The goal is to fill the white squares with letters, forming words or phrases, by solving clues which lead to the answers. In languages that are written left-to-right, the answer words and phrases are placed in the grid from left to right and from top to bottom. The shaded squares are used to separate the words or phrases. Squares in which answers begin are usually numbered. The clues are then referred to by these numbers and a direction, for example, "4-Across" or "20-Down". At the end of the clue the total number of letters is sometimes given, depending on the style of puzzle and country of publication. Some crosswords will also indicate the number of words in a given answer, should there be more than one.

Gori, Ernandes, & Angelini (2006, p. 1) summarize that Crossword game is an extremely popular word game evolved from a long line of word games. Arkadium (2015, p. 1) says that Crossword game is a fun and engaging free online game that are the answers to questions in a pattern of usual colors

as black and white squares. Litman, et al. (2002, p. 1) say that Crossword game is attempted daily by millions of people, and require of the solver both an extensive knowledge of language, history and popular culture, and the reasoning ability to execute a search over possible answers to find a set that fits in the grid. Efron as cited in Mazla (1976) summarizes that Crossword game is game comprised of a set of clues and an $n \times n$ grid that contains answer to the clues. Answer in the grid are interlaced; they appear horizontally (across) and vertically (down).

From the definitions above, it can be concluded that Crossword Game is word puzzle in which you write words those are the answers to questions in a pattern of black and white squares or that normally takes the form of a square or rectangular grid of white and shaded squares.

2. Teaching Steps Using Crossword Game

The writer uses direct instruction to teach vocabulary and constructs several steps based on the explanation of teaching technique through crossword games and developing all indicators of vocabulary:

1. Explain crossword game to the students.

Explain the concept of a crossword if necessary about the position, e.g. "1 down" or "2 across". Draw a two-word example crossword on the whiteboard (two copies, one on each side of the board, with half the words filled in on each), and use this to explain the activity: two people work together; each has a different sheet; they can't show the sheet to their partner or say the word, instead they must use English to explain it. Invite one of the students to help the teacher to demonstrate the activity using the example on the whiteboard.

2. Sound, meaning, and repetition for memorizing and testing

In this step, to find the meaning the teacher asks students to fill correct words based on the question as a meaning in down and across or vertical and horizontal. After the students complete all correct answers for vertical and horizontal, the teacher can say the word two or three times, pronounce

and spell it clearly. Of course the students must repeat what the teacher pronounces and spells those words. In this part, the students are able to spell the letters, pronounce the words and get the meaning of the words.

3. Written form for testing in the word

In this step, the teacher can ask student to use the word in a sentence or arrange the word to be a correct sentence from the question as a meaning in vertical or horizontal to complete the answer of crossword game. In this part, the students are able to study how to use the words.

3. Advantages of Crossword Game in Teaching Vocabulary

According to Kilickaya (2007) in a journal of Teaching English, crossword puzzles are excellent way to review vocabulary, as students will immediately know their answers are incorrect if they do not fit the puzzle. In addition, if the students cannot figure out the answer, they can simply count the squares in the puzzle, find words of equal length and then try to deduce the correct answer.

Paul (2003, p. 99) says that crossword game can be used at any level, and is wonderful way to bring together vocabulary from many different lesson. Paul adds that the combination of puzzle solving and fun can create a powerful learning tool in teaching and learning vocabulary.

According to Jones (2008, p. 489), crossword solving involves several useful skills including vocabulary, reasoning, spelling, and word attack skills. To solve any crossword puzzle, the students must be able to identify and understand the terms being used. This often involves acquiring new vocabulary or terminology. It can also involve making differentiations between similar words or phrases. Correctly deciphering a crossword also requires exact spelling, which for students may mean practicing dictionary skills. Other important skills required for completing these puzzles include making inferences, evaluating choices, and drawing conclusions.

4. Disadvantages of Crossword Game in Teaching Vocabulary

According to Gerlach (1980, p. 277), there are some disadvantages of crossword game in teaching and learning vocabulary process, such as:

1. Students pay attention on the crossword game more than on learned material.
2. It takes time and costs much to provide attractive crossword game.
3. Small and unclear crossword game may arouse problems in the teaching learning process since the students may misunderstand about the crossword puzzle.

Possible ways to overcome the disadvantages of crossword game are the following:

1. Teacher should avoid using crossword puzzle attracting more attention to them than to the activity in teaching vocabulary. She or He also should control the students' activities including their attention during the teaching learning process.
2. The teacher should make or choose attractive simple crossword game to avoid wasting time and money in teaching vocabulary.
3. The teacher should make or choose big and clear enough crossword puzzle in order to avoid misunderstanding about the crossword game in teaching vocabulary.

D. Motivation

1. Definition of Motivation in Learning

The theories of motivation come from a lot of different perspectives. Harmer (2002, p. 51) states that motivation is essential to success in most fields of learning because a learner wants to do something to succeed at it. Whittaker (1970, p. 142) states that motivation is a broad term used in psychology to cover the internal conditions or states that activate or energize

person and that lead to goal directed behavior. Weiner in Elliot et al. (2000, p. 332) defines that motivation is an internal states that arouses us to action, pushes us in particular direction, and keep us engaged in certain activities. Sorrentiono and Liggins (1990, p. 4) explain that motivation is a process pushing someone to act as his desire. The first is that motivation pushes and activates behavior, while the second is that it pushes someone to do something insides.

Another definition is proposed by Beck (1990, p. 28) defines that motivation is a psychological aspect dealing with behavior differences among individual from time to time. It is a process to push someone to act based on a certain objective. It is stated by Mitchell in Law and Glover (2000, p. 56), defining motivation as the degree to which an individual wants and chooses to engage in certain specified behaviors. How one chooses to behave is concerned with the internal and external forces, which influence his choice of action. The degree in which he engages in certain specified behaviors depends so much on whether his motivation is high or low. Brown (2007, p. 168) says that motivation is from behavioral, cognitive and behaviorist perspective. Behavioral views motivation as the anticipation of reward and it is driven to acquire the positive reinforcement. By the previous reward, the action will be repeated accordingly. In this case, motivation occurs because the mercy of the external forces such as parents, teachers, peers, educational requirement, job specification, and so forth. William and Burden's statement in Harmer (2004, p. 51) say that motivation is a state of cognitive arousal which provokes a decision to act as a result of which there is sustained intellectual and or physical effort in order to obtain previously set goal.

By the definitions above, it can be concluded that motivation is a decision to act and succeed in most fields of learning because a learner wants to do something as a result of which is sustained intellectual or physical effort in order to obtain a set goal of actions from behavioral, cognitive, and behaviorist perspective. Essentially, learning motivation is a process to

encourage a person to reach a goal. Motivation, like intelligence, cannot be directly observed. Motivation can only be inferred by noting a person's behavior, a type of movement as a part of process of taught, passion, desire, emotion, need, interest, curiosity, and psychology aspects.

2. Aspect of Motivation

Motivation leads individual to initiate the learning process, maintain the activities, and reach the goal. The following activities are the things that influence the learning activities according to Al-Bustan (2009) about the aspect of motivation, they are:

1. Attitudes (i.e. goal or sentiment towards target language)
2. Belief (i.e. expectation, interest on something, and curiosity of something new)
3. Goals (i.e. knowing goal of learning)
4. Involvement (i.e. curiosity of something new)
5. Environmental support (i.e. extent of teacher and peer support)
6. Personal attributes (i.e. self-determination and self-control)

Arden in Rohmah as the aspects of motivation (2012, p. 242). The things about the aspects of motivation are:

1. Curiosity (i.e. curiosity of something new)
2. Creativity
3. Praise from parents, teachers, and other friends (i.e. expectation on subject which will be studied)
4. Revision the previous mistakes (i.e. having self-determination and self-control on subject which will be studied)
5. Safety feeling (i.e. expectation on subject which will be studied)
6. Avoidance to punishment in the end of lesson (i.e. expectation on subject which will be studied).

According to Dornyei (2001, p. 72) teacher should have strategy-teaching how to motivate them. There are four most powerful executive motivational areas:

1. Making learning stimulating and enjoyable (i.e. having interesting on subject)

There are three main types of stimulation in this strategy as follows:

- a) Breaking the monotony of learning

Teacher should vary the learning tasks and other aspects of teaching as much as he can, focusing on the motivational flow and not just the information flow in class.

- b) Making the task more interesting

Teacher should make tasks challenging, make task content attractive to the students' natural interests or by including intriguing, humorous, short story, exotic, competitive or fantasy elements.

- c) Increasing the involvement of the student

Teacher should select task, which requires mental and/or bodily involvement of each participant; create specific role and personalized assignments for everybody.

2. Presenting tasks in a motivating way (having expectation)

Teacher should explain the purpose and utility of a task and provide appropriate strategies to carry out the task.

3. Setting specific learner goals (knowing the goal)

Teacher should encourage learner to select specific short-term goals for themselves, emphasize goal completion deadlines, and offer ongoing feedback.

4. Protecting the learners self-esteem and increasing their self-confidence

Teacher should provide experiences of success, encourage the learners, reduce language anxiety, and teach learner strategies.

There are ten forms of motivation to stimulate students' motivation based on Sadirman (1994, p. 91), they are:

1. Mark

Mark is important because it symbolizes student' learning activities. A good mark is usually a strong motivation to the students.

2. Reward

Reward is useful to motivate students. However, it does not work for some students.

3. Competition

Competition can trigger students to learn English in order to get a good result in their study. The students can realize their weakness and strength in English.

4. Ego-Involvement

Ego-involvement makes the students realize how important their duty or their assignment is. They can do it well, they will be proud of it. It will make the students motivated to do better.

5. Test

Usually, the students will study more when they will face a test.

6. Knowing the Result

Knowing the result of the students' study will be motivated to improve their study, for example in this case is their vocabulary mastery.

7. Praise

Praise is one of an effective and positive reinforcement to motivate and improve students' spirit, energy, and awareness in learning English.

8. Punishment

Punishment can be effective to motivate the students if the teachers understand the principles in giving it to their students. Besides, it can be said in negative reinforcement if the teachers do not understand how to use it in order to motivate and improve the students' self-esteem.

9. Interest

There are four things that can be done to evolve interest as follows:

- 1) Triggering needs
- 2) Relating interest to the students' prior knowledge
- 3) Giving opportunities to obtain a good result
- 4) Applying a various teaching techniques

10. Goals

If the students understanding the goals clearly, they will be triggered to study continuously to achieve the goals, in this case, their English vocabulary mastery.

Extracting from descriptions above, the researcher defines learning motivation as a state of absolute privacy of an individual as a learner who is derived from some key factors such as emotions, issues, goals, principles, theories, aspects, types, forms, and also functions of learning motivation. Learning motivation also needs another aspect, among the other is curiosity. Curiosity does not appear itself. The thing that leads the curiosity is interest. High interest leads individual to be curious. In learning process, student should obtain much information to solve the problem. Student should be creative in learning. Further, if the students are interested in learning, they can be creative. They try to make their activities as interesting as possible. The other influence is praises. Students need to be praised by others so they want to learn then get the praises. Praise is involved in the social influence. It comes from parents, teachers, or friends. Students will feel save if they get good score, praises, and avoid from punishment.

In this study, the writer decides five indicators in learning motivation, they are:

1. Knowing the goal of learning,
2. Having expectation on subject which will be studied,
3. Having curiosity of something new,
4. Having interest on subject which will be studied, and
5. Having self-determination and self-control on subject which will be studied.

Based on the explanation above, it can be concluded that teacher should create the most powerful and suitable and motivating strategies in encouraging and building their strengths and abilities in any learning activities.

E. Review of Previous Study

To support this research, it is considered necessary to review several studies related to the research. There are some previous researches related to some teaching media of Games.

First, Bakhsh, S. A., (2016) in his journal about using games as a tool in teaching vocabulary to young learners. He said that games are effective tools when devised to explain vocabularies and they make it easier to remember their meanings. This paper deals with a literature review of teaching English vocabulary to young learners using games. Then it discusses the importance of using games in teaching vocabulary and in what way using them is helpful. After that it investigates the practical implications of using games to teach vocabulary that includes the implementation of vocabulary games and some examples of games that could be used to teach vocabulary to children. And finally it examines challenges teachers face when teaching vocabulary using games to young learners.

Uzun et al. (2013) in the journal about developing and applying a foreign language vocabulary learning and practicing game through the effect of voca word. They summarized that Voca word is the name of this game. It is designed as a board game that is played quite similarly to one of world's famous games,

monopoly. The main difference of this game is that it focuses on learning and practicing the vocabulary in a foreign language. They proved in their qualitative and quantitative study that games offer to unify interests and needs. Using game through Voca Word is able to develop and it is easy to apply for foreign language in learning vocabulary. The students also enjoy to practice using simple game through Voca Word. Neville et al. (2009) says games are learner-centered that which is a feature that is valued and encouraged by most educators. Gaming creates an environment where the learners learn without the interference of the teacher, which provides them with more time for practice, and create anxiety-free condition as they are left on their own and not judged. They believed that games could explore the foreign learners to develop in learning vocabulary and apply them with voca word.

Okaz (2015) in his journal about lesson plan – online games to teach vocabulary to young learners. He conducted that several techniques, such as flashcard, dictionaries, and verbal explanation as well as games can be used while presenting and recycling new language items, yet the lesson tend to be tedious and laborious for both teacher and students. The online activities converted students' energy into a meaningful learning experience and help them associate what they have learned. Online game also created an anxiety-free learning environment.

In addition the other research taking perceptions of the use of digital letter games for language learning was also undertaken by Bianco, et al. (2016). They proved that the use of digital letter games for language learning can enhance learners to play a magic word for kids. They feel fun and want to play it again like a magic. Learning games engage students and then motivate them to interact with the topic. This interaction drives players to demonstrate their understanding of the topic in a friendly competition against themselves, other players, and the time and scoring standards. Moreover, during this play, players practice the social skills of communication, collaboration, and following instructions, as well as cognitive skills such as problem solving and critical thinking. Games help and encourage many learners to sustain their interest and work. Games also help the

teacher to create in which the language is useful. The learners want to take part and in order to do so must understand what others are saying or have written, and they must speak or write in order to express their own point of view or give information.

Furthermore, Aslanabadi & Rasouli (2013) proved the effect of games on improvement of Iranian EFL vocabulary knowledge in kindergartens. They divided the learners into the experimental group (giving an online language teaching game taken from: <http://anglomaniacy.pl>) and the control group (giving regular teaching). The result with the experimental group was superior to those of the control group. Games not only bring fun to the class, but also they motivate the students and build their confidence. The result of the study were analyzed, using (T-test). The study indicated that there are statistically significant differences in mean score of vocabulary test in favor of the experimental group in the post test application.

Chou, Mu-hsuan (2014) in his journal about assessing English vocabulary and enhancing young English as a Foreign Language (EFL) learners' motivation through games, songs, and stories. Research on teaching and assessing English in primary school education is relatively new compared with research on other levels of education in Taiwan. The present study was investigated the degree to which games, songs, and stories helped increase primary schools pupils' English vocabulary size and encouraged learning in an intensive English study. The result showed that games, songs, and stories had a positive effect on learning and increasing the pupils' English vocabulary.

F. Rationale

1. The differences between using vocabra game and crossword game in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

In comparing two teaching media, Vocabra Game and Crossword Game, there are some categories and context in the classroom

implementation. The general categories of both teaching media are illustrated in table 2.1

Table 2.1 General Categories of Vocabra Game and Crossword Game

Category	Vocabra Game (Rider, 2003)	Crossword Game (Kilickaya, 2007; Paul, 2003; and Jones, 2008)
Media Literacy	Printed media with the various media	Printed media with a crossword for across and down only
Purpose of media	<ol style="list-style-type: none"> 1. Persuade (to get the students to do what they are saying) 2. Inform (To give the students more information or teach them about something) 3. Entertaining (Keeps the students attention usually in an enjoyable way with more games) 4. New-fashion media 	<ol style="list-style-type: none"> 1. Inform (To give the students more information or teach them about something) 2. It can be used for any level 3. It can solve the problem for English vocabulary skills, such as: spelling and word attacks. 4. It can pay attention full 5. Old-fashion media
Students' role	Encourage students to be more active to choose various media.	Students tend to be passive to choose media.
Teacher's role	Teacher plays less role	Teacher plays bigger role
Vocabulary mastery	It doesn't waste the time to learn new word including how to spell the word, how to pronounce the word, the word meaning, and how to use the word in a sentence.	It wastes the time to think in filling the correct answer related to the questions to learn new word including how to spell the word, how to pronounce the word, the word meaning, and how to use the word in a sentence.

So, the researcher believes that using Vocabra Game is more effective than Crossword Game in teaching new vocabulary to the elementary school students, because it is more various to play in vocabulary mastery. In learning vocabulary, the students feel curious and want to practice more.

2. The differences between the students having high motivation and those having low motivation of the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

High-motivated students will provide artificial reinforcement, generate full interest and participation, consistent regarding mastery of learning, and also have positive attitudes by time period of learning activities (beginning, during, and ending). Students who have high learning motivation are usually actively involved and got full attention. Besides, they have a positive motivation and attitudes in vocabulary mastery. The result is that the students are more active and achieve considerable vocabulary mastery.

On the other hand, low-motivated students are passive in joining activities and have low attention to the subject. Low-motivated students cannot elaborate their critical thinking, ideas, and arguments about certain materials. In this case, they cannot help themselves from an intention to learn more and more. They cannot be motivated to perform well because of their low interest, curiosity to solve the problem, or the desire to understand during the lesson. There is no energy and a mental power from the students to reach the goal.

Seeing the characteristics between the students who have high and low learning motivation, it can be assumed that students who have high learning motivation have a better vocabulary mastery than those having low learning motivation.

3. Interaction between teaching media and students' motivation in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

Vocabra Games trigger to stimulate students more active and to be actively involved during the instructional activities by using a lot of Vocabra Game types, the students will have high interest and full attention when they face with different interesting media. This media has interesting type in vocabulary learning process about new words that they are going to learn,

some practices, and scores for each task. It will aim at acquiring practice rather than the other media in learning practice. This means that the activities will focus more on using forms to communicate than on the forms themselves. When students use a language to try to solve the problem or achieve some goal, success will be sufficient reward in itself. Hence, this media is appropriate for high-motivated students. High-motivated students are those who provide artificial reinforcement, generate full interest and participation, consistent regarding mastery of learning, and also have positive attitudes by time period of learning activities. They have high learning motivation and are usually actively involved, have full attention, and will stay involved for a long period of time. Students who are clearly motivated will have a positive display of emotion, and they are satisfied with their work and show more enjoyment in the activity. So, when high motivated students learn new vocabulary from Vocabra Games, they will not face difficulties and get bored.

Conversely, the Crossword Game media itself tends to be out of date. The material is less interesting. It triggers students to be passive. The teaching and learning process tends to have only one type so that the students will easily get bored with the lesson. It is not actually condition that wants to be achieved. Crossword Game may not reflect the students' needs, since Crossword Game is often written for global market, they often do not reflect the interests and needs of students. Hence, Crossword Game media is more appropriate for students with low motivation. Low-motivated students are those who are passive in joining activities and have low attention to the subject, because of monotone media. They do not have curiosity to solve the problem or desire to understand during the lesson. They cannot be motivated to perform well because of their low interests, there is no energy, and a mental power from the students to reach the goal. Low-motivated students will also give up very easily when they are not instantly successful. So, when they are learning new vocabulary by using various types of media, such as Vocabra Games, they will stay and focus to learn them.

Based on the description above, it can be concluded that there is an interaction between teaching media and student' motivation. An attractive teaching media such as Vocabra Game is appropriate for high-motivated students to have an intention to learn actively more and more. On the other hand, Crossword Game media is more likely appropriate for the students with low motivation, since Crossword Game media is less interesting and make the students tend to be passive and bored.

G. Hypothesis

Based on the underlying theories, the hypotheses of the research can be formulated as follows:

- 1) The use of vocabra game is more effective than crossword game in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.
- 2) The students having high motivation have better vocabulary mastery than those having low motivation of the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.
- 3) There is an interaction between teaching media and students' motivation in teaching vocabulary to the fifth grade students at SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

CHAPTER III

RESEARCH METHOD

This chapter discusses several points related to the way this study is conducted, which consists of six sections. The first section is place, time of the research. The second section presents research method. The third section is population, sample, and sampling formulated in this study. The fourth section presents data collection. The fifth section is technique of analyzing data. The last section explains statistical hypothesis.

A. Place and Time of the Research

The research is conducted to the fifth grade students in one of Elementary School Cirebon in the academic year of 2018/2019. The research was conducted from Augustus 2017 to December 2018. The schedule of the research is presented in table 3.1

Table 3.1 Time Schedule of the Research

Activities	Augustus – April (2017) (2018)	May - July (2018)	Augustus - October (2018)	October – December (2018)
Arranging proposal	X			
Conducting Proposal Seminar		X		
Conducting Treatment			X	
Collecting and Analyzing the Data				X
Making Report				X

B. Research Method

In this research, the writer used the experimental study to find out the result of the use of media in teaching vocabulary. Experimental study is chosen in conducting this research. The purpose of experimental study is to determine

cause-and-effect relationship. Through experimentations, cause and effect relationship can be identified. Because of this ability to identify caution, the experimental approach has come to represent the prototype of scientific method for solving problems (Johnson and Christensen, 2000, p. 23).

By experimental study, the researcher found out the effect of at least one independent variable on one or more dependent variables. This study involves three kinds of variables. The first is independent variable, it is experimental or treatment variable. The independent variable is the teaching media (X), and the students' motivation is as the second independent variable. The third variable is vocabulary mastery as dependent variable (Y). The writer supposes that the relationship between X and Y is changed by the level of students' motivation.

This research used quasi-experimental research design, quasi experiments do not use proper random assignment, and typically they recruit people in a way that can cause bias, such as using "people on the street". In compensation for this, other methods are used to increase the reliability and validity of the experiment, for example by using a control group (<http://changingminds.org>). There are a lot of quasi-experiment design types; one of them is factorial design. The most appropriate experimental design of this research is factorial design. This research design allows a researcher to study the interaction of an independent variable with one or more variables. This design is possible to assess the effect or interaction (Tuckman, 1978, p. 135). The factorial design is illustrated as follows:

Table 3.2 Factorial Design 2X2

Teaching media Motivation	Vocabra game (A ₁)	Crossword game (A ₂)
High (B ₁)	First group of students (A ₁ B ₁)	Second group of students (A ₂ B ₁)
Low (B ₂)	Third group of students (A ₁ B ₂)	Fourth group of students (A ₂ B ₂)

Note:

Independent variable : teaching media (Vocabra game and Crossword game)

Experimental group : the class taught by using Vocabra Games

Control group : the class taught by using Crossword Games

Dependent variable : Vocabulary mastery

Moderator variable : students' motivation

Where:

A₁ : the scores of vocabulary test of experimental class which is taught by using Vocabra Games

A₂ : the scores of vocabulary test of control class which is taught by using Crossword Games

B₁ : the scores of vocabulary test of students having high motivation

B₂ : the scores of vocabulary test of students having low motivation

A₁B₁: the scores of vocabulary test of students having high motivation who are taught by using Vocabra Games

A₁B₂: the scores of vocabulary test of students having low motivation who are taught by using Vocabra Games

A₂B₁: the scores of vocabulary test of students having high motivation who are taught by using Crossword Games

A₂B₂: the scores of vocabulary test of students having low motivation who are taught by using Crossword Games

C. Population, Sample, and Sampling

1. Population

Population means the group of people whom the study is about (Dornyei, 2007, p. 95). It can be concluded that population is a collective whole of people that researchers collect data. The population of this research was the fifth grade students of SDIT Sabilul Huda Cirebon. There were 3 classes with 85 students.

2. Sample

Lodico, Spaulding, and Voegtler (2010, p. 216) define sample as smaller version population. So, it can be concluded that sample is one of many possible sub sets that are selected from the population of interest. The sample of this research was then class Turkey 28 and Habasyah 28 the students in one of Elementary School Cirebon. They were ten years old. So, the total number of the sample was 56 students.

3. Sampling

In this study, the writer used cluster random sampling to take the two classes from three classes. The first step in sampling is to define the population. Once this has been done, the researcher must select a sample or representative groups from the population to search as respondents. Then, the two classes are distributed randomly into the experimental group and control group.

The way how to decide two classes from three classes by using lottery are as follows:

- 1) Three classes were written each on a piece of paper and put inside a small box.
- 2) Shake the small box for a moment then take the piece of papers one by one in which the first and the second taken paper would be the sample.

The way how to decide the experimental group and control group by using lottery from the class written on the first and the second taken paper are as follows:

- 1) Two classes written on the first and the second taken paper were put inside a small box.
- 2) Shake the small box for a moment then take the piece of papers one by one in which the class first taken would be an experimental class.

Turkey and Habasyah were chosen as the sample which consists of 56 students. Here, 28 students were taken from class Turkey and 28 students from class Habasyah in which the students of Turkey were experimental group. The control group of this experiment was students of Habasyah.

Actually three classes here have mixed students between the smartest, quite smart, and not quite smart, so this sample is considered representative enough to be used as a subject of research. The students of Turkey were the experimental group. In this class, the teacher taught vocabulary using Vocabra Games. The control group of this experiment was students of Habasyah. In this class, the teacher taught vocabulary using Crossword Games.

D. The Technique of Collecting Data

The data to support the research were collected from the students using three kinds of instruments, they were multiple-choice test, oral test, and questionnaire. The students had to do a test of multiple-choice test dealing with mastering vocabulary after getting some treatments (Fraenkel and Wallen, 2012). This multiple choice test was formulated based on three indicators of vocabulary: meaning, spelling, and using the words in sentences. On the other hand, oral test was formulated for pronunciation of the new words. In this test, the students were asked to pronounce some words that they have learned. Students were asked to read some words aloud while the researcher listened and scored. This way is one of the most common ways of testing pronunciation in which students read aloud words and sentences.

To measure the students' motivation, the researcher used questionnaire. Wilson and Mclean in Cohen, Manion, and Morrison (2005, p. 262) believe that the questionnaire is a widely used and useful instrument for collecting information.

This kind of information can be transformed into numbers or quantitative data by using the scaling or rating-scale techniques or by counting

the number of respondents who give a particular response, thus generating frequency data. The questionnaire was used to classify students into two groups, students who have high motivation and those who have low motivation. The researcher employed median to classify the sample. The students who have greater score than median are classified into high motivation students and the rest or the students who have less score than median are classified into low motivation students. The questionnaire consists of statements about students' motivation. There are four alternatives that can be chosen in each item and there is no right or wrong answer since the students' responses are based on their real condition.

All good instruments possess two qualities: validity and reliability. Reliability refers to the consistency of the measure. Reliability and validity are the most important characteristics of measuring instruments. The instruments of try-out need to be analyzed and the scores of try-out are analyzed in term of their validity and reliability. In this research, the kinds of validity and reliability being analyzed were internal validity and internal reliability.

The formula of them are as follows:

1. Validity

a. Validity of Vocabulary Test Items:

$$r_{pbis} = \frac{\bar{X}_i - \bar{X}_t}{s_t} \sqrt{\frac{p_i}{q_i}}$$

Where:

r_{pbis} = biserial point correlation validity

\bar{X}_i = mean of X

\bar{X}_t = numbers of items

s_t = root of sigma X square divided by denominators

P_i = proportion of the correct answer

q_i = proportion of the wrong answer divided by the number of students

$$\bar{X}_t = \frac{\sum X_t}{n}$$

$$s_t = \sqrt{\frac{\sum x_t^2}{n}}$$

$$\sum x^2 = \sum X^2 - \frac{(\sum X)^2}{n}$$

The tryout of vocabulary test which consists of 30 items was held in August to November 2018. After trying the items out, the researcher analyzed the validity and reliability of vocabulary test items.

b. Validity of Questionnaire:

$$r_{it} = \frac{\sum x_i x_t}{\sqrt{(\sum x_i^2)(\sum x_t^2)}}$$

Where:

r_{it} = coefficient of validity

$\sum x_i x_t$ = total of item variance

$\sum x_i^2$ = total of item variance

$\sum x_t^2$ = total of variance

2. Reliability

a. Reliability of Vocabulary Test Items:

$$r_{kk} = \frac{k}{k-1} \left(1 - \frac{\sum pq}{St^2} \right)$$

where:

r_{kk} = Kuder –Richardson formula 20 reliability coefficient

k = the number of test items

p = the proportion of test takers who pass the items

q = the proportion of test takers who fail the items

St^2 = the variance of the total test scores

To know whether the instrument is reliable or not r_o is compared with r_t

b. Reliability of Questionnaire

$$r_{kk} = \frac{k}{k-1} \left(1 - \frac{\sum s_i^2}{s_t^2} \right)$$

Where:

r_{kk} = coefficient of reliability

k = total of valid items

s_t^2 = total variance

$\sum s_i^2$ = total of variance items

E. Technique of Analyzing Data

The data was collected to examine the effects of Vocabra Games in this research based on the score of the vocabulary test. The data were arranged and then classified into some categories to make the frequency distribution table, histogram, and polygons. After knowing the histogram and polygon, it continued to analyze the mean, median, mode, the normality and homogeneity of the data as follows:

1. Mean

Data in frequency distribution:

$$\bar{x} = \frac{\sum f_i x_i}{N}$$

Where:

f_i = frequency

x_i = midpoint

2. Mode

$$Mo = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\}$$

Where:

L = the lower limit of the interval within which the mode lies

i = interval (class width)

f_1 = the frequency of the interval containing mode reduced by that of the previous interval

f_2 = the frequency of the interval containing mode reduced by that of the following interval

3. Median

$$Me = L + i \left\{ \frac{N/2 - cfb}{fw} \right\}$$

Where:

L = the lower limit of the interval within which the median lies

i = interval class (width)

cfb = the cumulative frequency in all interval below the interval containing the median

fw = the frequency of cases within the interval containing the median

3) Standard Deviation for the Data in Frequency Distribution

$$S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n - 1}$$

Where:

S = Standard Deviation

$\sum f_i X_i^2$ = The sum of the squares of each score (that is, each score is first squared, these squares are summed)

$(\sum f_i X_i)^2$ = The sum of scores squared (the scores are first summed, then the total is squared)

n = The number of cases in the distribution

4) Normality of the Data

$$a. S = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}}$$

- b. $z_1 = \frac{x - \bar{x}}{s}$
- c. $F(z_1) = 0,5 - (\text{table } E)$
- d. $s(z_1) = \frac{1}{n}$
- e. $L_o = F(z_1) - S(z_1)$

5) Data Homogeneity

- a. $S_1^2 = \frac{\sum x_1^2 - \frac{(\sum x_1)^2}{n}}{n-1}$
- b. $S_2^2 = \frac{\sum x_2^2 - \frac{(\sum x_2)^2}{n}}{n-1}$
- c. $S_3^2 = \frac{\sum x_3^2 - \frac{(\sum x_3)^2}{n}}{n-1}$
- d. $S_4^2 = \frac{\sum x_4^2 - \frac{(\sum x_4)^2}{n}}{n-1}$
- e. $S^2 = \{\sum(n_i - 1)S_i^2 / \sum(n_i - 1)\}$
- f. $\log S^2 = \dots$
- g. $B = (\log s^2) \sum(n_i - 1)$
- h. $\chi_o^2 = (\ln 10) \{B - \sum(n_i - 1) \log s_i^2\}$

6) Hypothesis test

1) The researcher used ANOVA (2X2) to analyze the data as follows:

- a. The total sum of squares:

$$\sum x_t^2 = \sum X_t^2 - \frac{\sum X_t^2}{N}$$

- b. The sum of squares within groups.

$$\sum x_b^2 = \frac{X_1^2}{n_1} + \frac{X_2^2}{n_2} + \frac{X_3^2}{n_3} + \frac{X_4^2}{n_4} - \frac{X_t^2}{N}$$

c. The sum of squares within groups:

$$\sum x_w^2 = \sum x_t^2 - \sum x_b^2$$

d. The between-columns sum of scores:

$$\sum x_{bc}^2 = \frac{\sum x_{c1}^2}{n_{c1}} + \frac{\sum x_{c2}^2}{n_{c2}} - \frac{\sum x_t^2}{N}$$

e. The between-rows sum of scores:

$$\sum x_{br}^2 = \frac{\sum x_{r1}^2}{n_{r1}} + \frac{\sum x_{r2}^2}{n_{r2}} - \frac{\sum x_t^2}{N}$$

f. The sum of squares interaction:

$$\sum x_{int} = \sum x_b^2 - \sum x_{bc}^2 + \sum x_{br}^2$$

g. The number of degrees of freedom associated with each source of variation:

df for between-column sum of squares	= C-1
df for between-rows sum of squares	= R-1
df for interaction	= (C-1)(R-1)
df for between-groups sum of squares	= G-1
df for within-groups sum of squares	= $\sum(n - 1)$
df for total sum of squares	= N-1

where:

C = the number of columns

R = the number of rows

G = the number of groups

n = the number of subjects in one group

N = the number of subjects in all group

The steps used are designed from table as follows:

Table 3.3. Design for ANOVA

1 st Effect 2 nd Effect	Vocabra Games (A ₁)	Crossword Game (A ₂)	Total
High Motivation (B ₁)	Group 1 $\sum X_{c_1 r_1}$ $\bar{X}_{c_1 r_1}$	Group 2 $\sum X_{c_2 r_1}$ $\bar{X}_{c_2 r_1}$	$\sum X_{r_1}$ \bar{X}_{r_1}
Low Motivation (B ₂)	Group 3 $\sum X_{c_1 r_2}$ $\bar{X}_{c_1 r_2}$	Group 4 $\sum X_{c_2 r_2}$ $\bar{X}_{c_2 r_2}$	$\sum X_{r_2}$ \bar{X}_{r_2}
Total	$\sum X_{c_1}$ \bar{X}_{c_1}	$\sum X_{c_2}$ \bar{X}_{c_2}	$\sum X_t$ \bar{X}_t

2). Tuckey Test

Tuckey's test was done to look for q_0 which was found by comparing the difference between the means by the square root of the ratio of the within group variation and sample size. The general formula is as follows:

a. Comparing two means from two groups (A₁ and A₂)

Vocabra Game is compared to Crossword Game (between columns)

$$q = \frac{\bar{X}_{c_1} - \bar{X}_{c_2}}{\sqrt{\text{Error variance}/n}}$$

b. Comparing two means from two groups (B₁ and B₂)

Students having high motivation are compared to students having low motivation (between rows)

$$q = \frac{\bar{X}r_1 - \bar{X}r_2}{\sqrt{\text{Error variance}/n}}$$

c. Comparing two means between A₁B₁ and A₂B₁

Vocabra Game is compared to Crossword Game for students having high motivation

$$q = \frac{\bar{X}c_1r_1 - \bar{X}c_2r_1}{\sqrt{\text{Error variance}/n}}$$

d. Comparing two means between A₁B₂ and A₂B₂

Vocabra games is compared to Crossword Game for students having low motivation

$$q = \frac{\bar{X}c_1r_2 - \bar{X}c_2r_2}{\sqrt{\text{Error variance}/n}}$$

Or

$$q = \frac{\bar{X}c_2r_1 - \bar{X}c_1r_2}{\sqrt{\text{Error variance}/n}}$$

The analysis result of the computation q_o is compared to q_t , if $q_o > q_t$, the difference is significant; and to know which one is better, the means are compared.

F. Statistical Hypothesis

In this research, the researcher proposed three hypotheses. These hypotheses were based on the formulation of the problems. They are:

1. The difference between Vocabra Game (A₁) and Crossword Game (A₂) to teach vocabulary for the students at the elementary school.

$H_o: \mu_{A_1} = \mu_{A_2}$ There is no significant difference in vocabulary mastery between the students who are taught by vocabra game and students who are taught by crossword game.

$H_a: \mu_{A_1} > \mu_{A_2}$ The students who are taught by using vocabra game have better vocabulary mastery than those who are taught by using crossword game.

2. The difference between the students who have high motivation (B_1) and those who have low motivation (B_2)

$H_o: \mu_{B_1} = \mu_{B_2}$ There is no significant difference in vocabulary mastery between the students who have high motivation and students who have low motivation.

$H_a: \mu_{B_1} > \mu_{B_2}$ The students who have high motivation have better vocabulary mastery than those who have low motivation.

3. Interaction between the media used (Vocabra Game and Crossword Game) (A) and motivation (B) in teaching vocabulary for the students at the elementary school.

$H_o: AXB = 0$ There is no interaction between teaching media and students' motivation in teaching vocabulary. It means that the effect of teaching media on vocabulary mastery does not depend on students' motivation.

$H_a: AXB > 0$ There is an interaction between teaching media and students' motivation in teaching vocabulary. It means that the effect of teaching media on vocabulary mastery depends on students' motivation.

CHAPTER IV

THE RESULT OF STUDY

The data gained from a research field are analyzed to get the clear conclusion. The steps that are taken can be classified as the following steps: (1) Data description; (2) Data analysis; (3) Hypotheses verification; and (4) Discussion. These four steps can be classified chronologically and explained clearly as follows:

A. Data Description

The study of this research is aimed at investigating the effectiveness of vocabra game in vocabulary mastery. This study was conducted at SDIT Sabilul Huda Cirebon. The writer took two five years classes as the sample, they were class Turkey as the experimental group and class Habasyah as control group. Each class comprises of 26 students.

Having done the data for experimental class and control class, the writer gave different treatments to the groups. After giving the treatments, the writer has given questionnaire first to the students' learning motivation for both classes. At the end of the treatment, the students are given a post-test. The data, which are analyzed in this study, are the result of the post-test.

The description includes mean, mode, median, standard deviation, and frequency distribution followed by histogram and polygon. Based on the group analyzed, the description of the data are as follows:

1. The data of vocabulary mastery test of the students who were taught using vocabra game (A_1).
2. The data of vocabulary mastery test of the students who were taught using crossword game (A_2).
3. The data of vocabulary mastery test of the students who had high learning motivation (B_1).

4. The data of vocabulary mastery test of the students who had low learning motivation (B_2).
5. The data of vocabulary mastery test of the students having high learning motivation who were taught using vocabra game (A_1B_1).
6. The data of vocabulary mastery test of the students having low learning motivation who were taught using vocabra game (A_1B_2).
7. The data of vocabulary mastery test of the students having high learning motivation who were taught using crossword game (A_2B_1).
8. The data of vocabulary mastery test of the students having low learning motivation who were taught using crossword game (A_2B_2).

Before the data are analyzed by using multifactor analysis of variance (ANOVA), here is the description of each group.

1. The data of vocabulary mastery of the students who were taught using vocabra game (A_1).

From the result of the experimental group (A_1) post-test, it can be observed that the highest score is 10 and the lowest score is 7. The mean of the score is 8.73, the mode is 9.60, the median is 9.20, and the standard deviation is 20.18. The frequency of distribution of these data can be seen on Table 4.1 and the histogram and polygon of the frequency distribution can be seen on Figure 4.1.

Table 4.1. The Frequency Distribution of the Post-test Scores of the Experimental Group (A_1).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	15.38
7.5 - 7.9	7.45 - 7.95	7.7	4	30.8	948.64	15.38
8 - 8.4	7.95 - 8.45	8.2	2	16.4	268.96	7.692
8.5 - 8.9	8.45 - 8.95	8.7	2	17.4	302.76	7.692
9 - 9.4	8.95 - 9.45	9.2	5	46	2116	19.23
9.5 - 10	9.45 - 10.05	9.75	9	87.8	7700.063	34.62
			26	227	12165.86	100

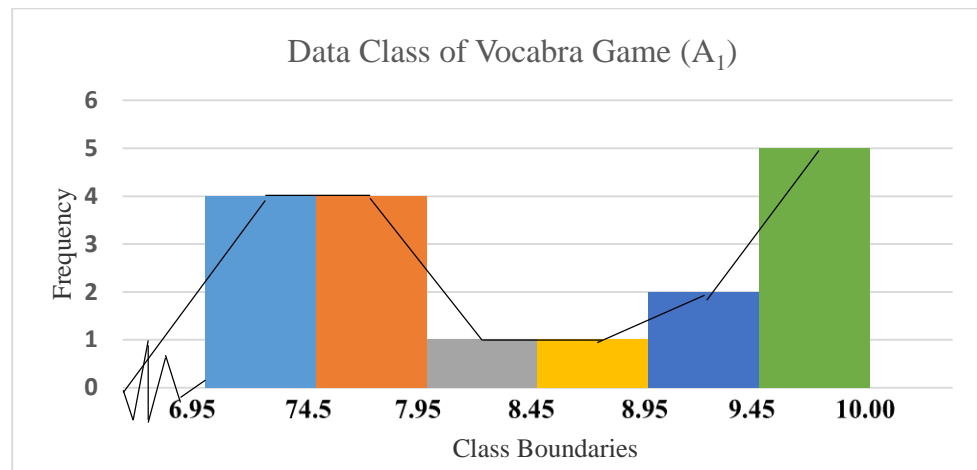


Figure 4.1. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Experimental Group (A_1).

2. The data of vocabulary mastery of the students who were taught using crossword game (A_2).

In the Control Group (A_2), the highest score is 9.3 and the lowest score is 7. The mean of the score is 8.23, the mode is 9.11, the median is 8.28, and the standard deviation is 17.49. Table 4.2 is the frequency distribution of post-test scores of control group while Figure 4.2 is the histogram and the polygon of the frequency distribution.

Table 4.2. The Frequency Distribution of the Post-test Scores of the Control Group (A_2).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.3	6.95 - 7.35	7.15	4	28.6	817.96	15.38
7.4 - 7.7	7.35 - 7.75	7.55	5	37.8	1425.063	19.23
7.8 - 8.1	7.75 - 8.15	7.95	2	15.9	252.81	7.692
8.2 - 8.5	8.15 - 8.55	8.35	6	50.1	2510.01	23.08
8.6 - 8.9	8.55 - 8.95	8.75	2	17.5	306.25	7.692
9 - 9.3	8.95 - 9.35	9.15	7	64.1	4102.403	26.92
			26	214	9414.495	100

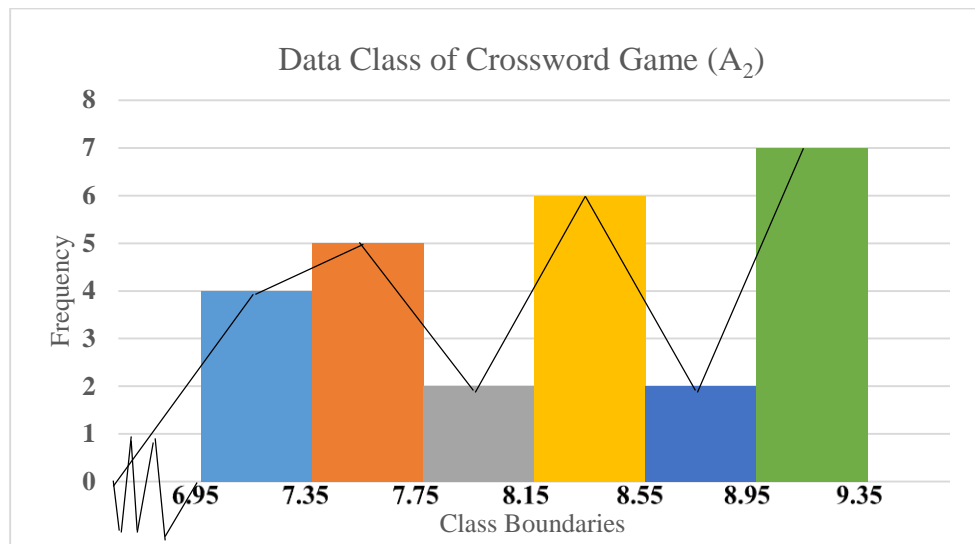


Figure 4.2. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Control Group (A_2).

3. The data of vocabulary mastery of the students who had high motivation (B_1).

In the high motivation (B_1), the highest score is 10 and the lowest is 7. The mean of the score is 8.69, the mode is 9.62, the median is 8.55, and the standard deviation is 20.20. Table 4.3 is the frequency distribution of post-test scores of high learning motivation group while Figure 4.3 is the histogram and the polygon of the frequency distribution.

Table 4.3. The Frequency Distribution of the Post-test Scores of High Motivation (B_1).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	15.38
7.5 - 7.9	7.45 - 7.95	7.7	3	23.1	533.61	11.54
8 - 8.4	7.95 - 8.45	8.2	5	41	1681	19.23
8.5 - 8.9	8.45 - 8.95	8.7	1	8.7	75.69	3.846
9 - 9.4	8.95 - 9.45	9.2	4	36.8	1354.24	15.38
9.5 - 10	9.45 - 10.00	9.75	9	87.8	7700.063	34.62
			26	226	12174.04	100

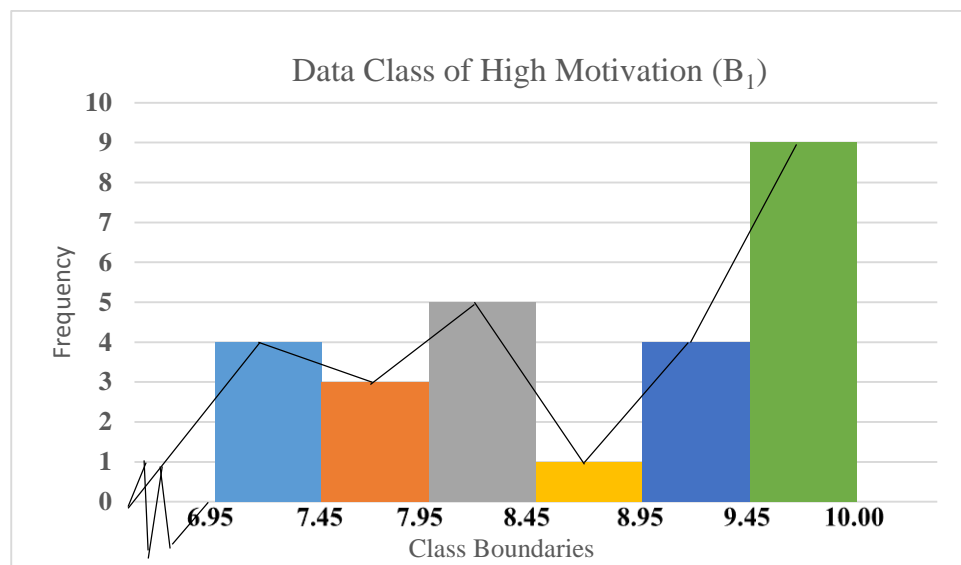


Figure 4.3. The Frequency Distribution of the Post-test Scores of High Motivation (B_1).

4. The data of vocabulary mastery of the students who had low motivation (B_2).

In the low motivation (B_2), the highest score is 9.3 and the lowest is 7. The mean of the score is 8.23, the mode is 9.10, the median is 8.28, and the standard deviation is 17.92.

Table 4.4 is the frequency distribution of post-test scores of high learning motivation group while Figure 4.4 is the histogram and the polygon of the frequency distribution.

Table 4.4. The Frequency Distribution of the Post-test Scores of Low Motivation Group (B_2).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.3	6.95 - 7.35	7.15	4	28.6	817.96	15.38
7.4 - 7.7	7.35 - 7.75	7.55	6	45.3	2052.09	23.08
7.8 - 8.1	7.75 - 8.15	7.95	2	15.9	252.81	7.692
8.2 - 8.5	8.15 - 8.55	8.35	3	25.1	627.5025	11.54
8.6 - 8.9	8.55 - 8.95	8.75	3	26.3	689.0625	11.54
9 - 9.3	8.95 - 9.35	9.15	8	73.2	5358.24	30.77
			26	214	9797.665	100

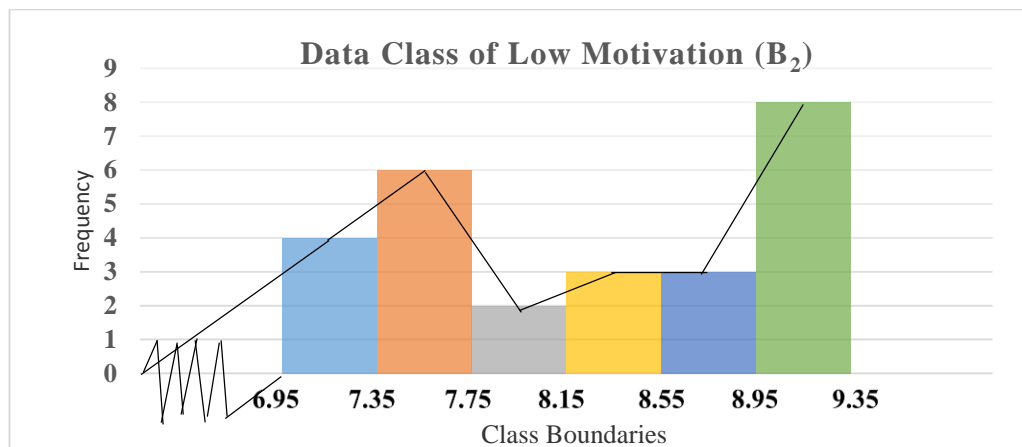


Figure 4.4. The Frequency Distribution of the Post-test Scores of Low Motivation Group (B_2).

5. The data of vocabulary mastery of the students having high motivation who were taught using vocabra game (A_1B_1).

From the data, it can be observed that the number of respondents is 13, the highest score is 10, and the lowest score is 9. The mean of the score is 9.69 the mode is 9.97, the median is 9.77, and the standard deviation is 18.74. The frequency distribution of this group could be found on the Table

4.5 and the histogram and polygon of the frequency distribution can be found on Figure 4.5

Table 4.5. The Frequency Distribution of the Post-test Scores of the Experimental Group Having High Motivation (A_1B_1).

Class Limit	Class Boundaries	Mid point (X_i)	Freq (F_i)	F_iX_i	$(F_iX_i)^2$	Percentage
9 - 9.2	8.95 - 9.25	9.1	1	9.1	82.81	7.692
9.3 - 9.5	9.25 - 9.55	9.4	4	37.6	1413.76	30.77
9.6 - 9.8	9.55 - 9.85	9.7	2	19.4	376.36	15.38
9.9 - 10	9.85 - 10.05	9.95	6	59.7	3564.09	46.15
			13	126	5437.02	100

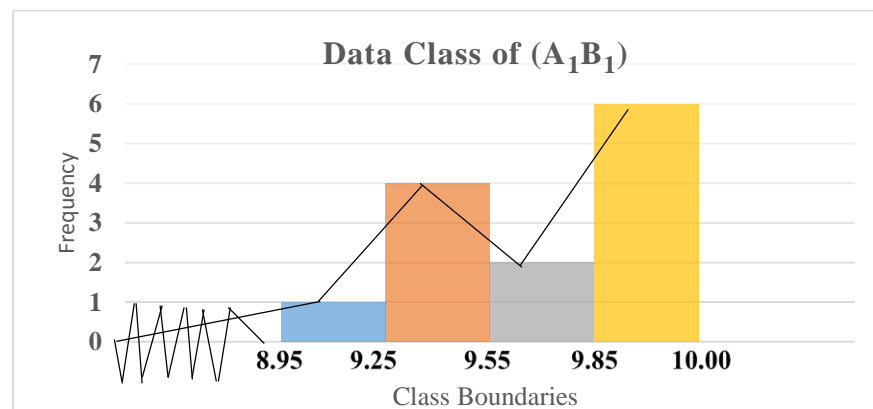


Figure 4.5. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Experimental Group Having High Motivation (A_1B_1).

6. The data of vocabulary mastery of the students having high motivation who were taught using crossword game (A_2B_1).

From the data, it can be observed that the number of respondents is 13, the highest score is 8.6, and the lowest score is 7. The mean of the score is 7.84, the mode is 8.11, the median is 7.86, and the standard deviation is 13.90. The frequency distribution of this group could be found on the Table 4.6 and the histogram and polygon of the frequency distribution can be found on Figure 4.6.

Table 4.6. The Frequency Distribution of the Post-test Scores of the Control Group Having high Motivation (A_2B_1).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	F_iX_i	$(F_iX_i)^2$	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	30.77
7.5 - 7.9	7.45 - 7.95	7.7	3	23.1	533.61	23.08
8 - 8.4	7.95 - 8.45	8.2	5	41	1681	38.46
8.5 - 8.9	8.45 - 8.95	8.7	1	8.7	75.69	7.692
			13	102	3119.74	100

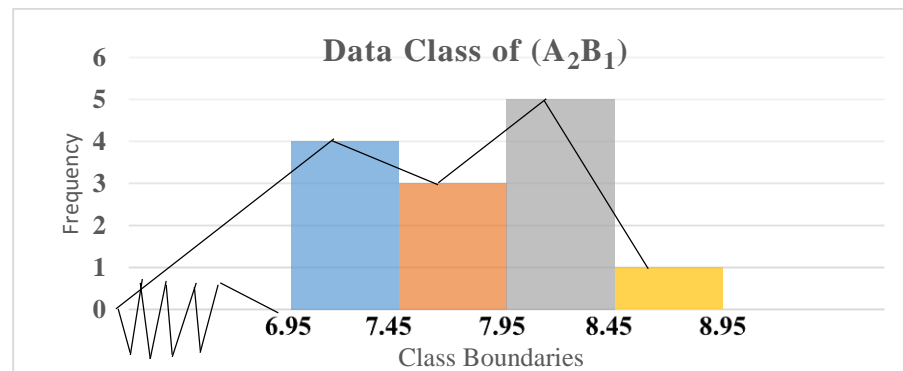


Figure 4.6. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Control Group Having High Motivation (A_2B_1).

7. The data of vocabulary mastery of the students having low motivation who were taught using vocabra game (A_1B_2).

The number of respondents of this cell is 13. The highest score is 9 and the lowest score is 7. The mean of the score is 7.84, the mode is 7.95, the median is 7.76, and the standard deviation is 12.70. Table 4.7 is the frequency distribution of the post-test scores of the control group having high learning motivation while Figure 4.7 is the histogram and polygon of the frequency distribution of this group.

Table 4.7. The Frequency Distribution of the Post-test Scores of the Experimental Group Having Low Motivation (A_1B_2).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	F_iX_i	$(F_iX_i)^2$	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	30.77
7.5 - 7.9	7.45 - 7.95	7.7	4	30.8	948.64	30.77
8 - 8.4	7.95 - 8.45	8.2	2	16.4	268.96	15.38
8.5 - 9	8.45 - 9.05	8.75	3	26.3	689.0625	23.08
			13	102	2736.103	100

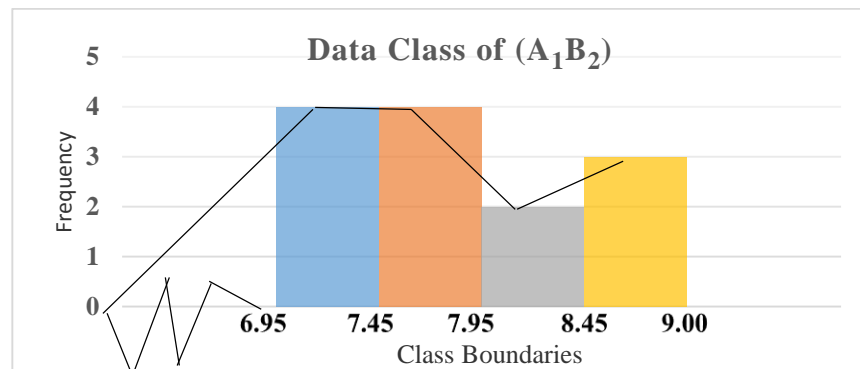


Figure 4.7. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Experimental Group Having Low Motivation (A_1B_2).

8. The data of vocabulary mastery of the students having low motivation who were taught using crossword game (A_2B_2).

Based on the data, it is resulted that the number of respondent is 13. The highest score is 9.3 and the lowest score is 7.6. The mean of the score is 8.61, the mode is 8.85, the median is 8.70, and the standard deviation is 14.64. The frequency distribution of this group can be seen on Table 4.8 and the histogram and polygon of the frequency distribution can be seen on Figure 4.8.

Table 4.8. The Frequency Distribution of the Post-test Scores of the Control Group Having Low Motivation (A_2B_2).

Class Limit	Class Boundaries	Mid Point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7.6 - 8	7.55 - 8.05	7.8	3	23.4	547.56	23.08
8.1 - 8.5	8.05 - 8.55	8.3	2	16.6	275.56	15.38
8.6 - 9	8.55 - 9.05	8.8	5	44	1936	38.46
9.1 - 9.5	9.05 - 9.55	9.3	3	27.9	778.41	23.08
			13	112	3537.53	100

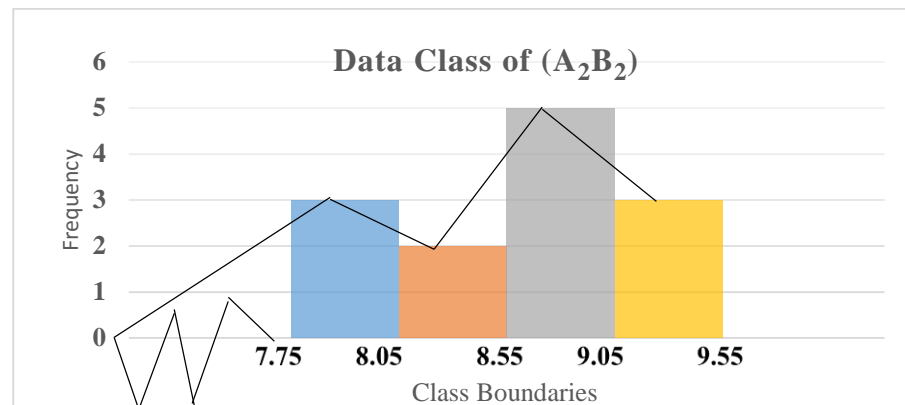


Figure 4.8. The Histogram and Polygon of the Frequency Distribution of the Post-test Scores of the Control Group Having Low Motivation (A_2B_2).

B. Prerequisite Testing

The statistics analysis needs several requirements that have to be met, namely, normality and homogeneity testing.

1. Normality Testing

The function of liliefors testing here is used to compute the normality of the data. The normality test is to check whether the data are in normal distribution or not. If L_o (L obtained) is lower than L_t (L table) at the level of significance $\alpha = 0.05$ on Liliefors, the sample is in normal distribution. The formula used in this testing is:

$$s = \sqrt{\frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1}}$$

$$z_1 = \frac{x - \bar{x}}{s}$$

a) Cell (A₁)

This cell contains 26 students who are taught using vocabra game (n = 26), The highest value of |F(z_i)-s(z_i)| is 0.151 and L_t is 0.161. Because L_o is lower than L_t (0.151) < (0.161), it can be concluded that the sample is in normal distribution.

b) Cell (A₂)

This cell contains 26 students who are taught using crossword game (n = 26), the highest value of |F(z_i)-s(z_i)| is 0.146 and L_t is 0.161. Because L_o is lower than L_t (0.146) < (0.161), it can be concluded that the sample is in normal distribution.

c) Cell (B₁)

This cell contains 26 students who are having high motivation (n = 26), the highest value of |F(z_i)-s(z_i)| is 0.151 and L_t is 0.161. Because L_o is lower than L_t (0.151) < (0.161), it can be concluded that the sample is in normal distribution.

d) Cell (B₂)

This cell contains 26 students who are having low motivation (n = 26), the highest value of |F(z_i)-s(z_i)| is 0.146 and L_t is 0.161. Because L_o is lower than L_t (0.146) < (0.161), it can be concluded that the sample is in normal distribution.

e) Cell (A₁B₁)

This cell contains 13 students having high learning motivation who are taught using vocabra game (n = 13), the highest value of |F(z_i)-s(z_i)| is

0.1977 and L_t is 0.234. Because L_o is lower than L_t ($0.1977 < 0.234$), it can be concluded that the sample is in normal distribution.

f) Cell (A_2B_1)

This cell contains 13 students having high learning motivation who are taught using crossword game ($n = 13$), the highest value of $|F(z_i) - s(z_i)|$ is 0.212 and L_t is 0.234. Because L_o is lower than L_t ($0.212 < 0.234$), it can be concluded that the sample is in normal distribution.

g) Cell (A_1B_2)

This cell contains 13 students having low learning motivation who are taught using vocabra game ($n = 13$), the highest value of $|F(z_i) - s(z_i)|$ is 0.197 and L_t is 0.234. Because L_o is lower than L_t ($0.197 < 0.234$), it can be concluded that the sample is in normal distribution.

h) Cell (A_2B_2)

This cell contains 13 students having low learning motivation who are taught using crossword game ($n = 13$), the highest value of $|F(z_i) - s(z_i)|$ is 0.170 and L_t is 0.234. Because L_o is lower than L_t ($0.170 < 0.234$), it can be concluded that the sample is in normal distribution.

Table 4.9. The Normality Test

No	Data	The Number of Sample	L_o	L_t	α	Distribution of Population
1	A_1	26	0.151	0.161	0.05	Normal
2	A_2	26	0.146	0.161	0.05	Normal
3	B_1	26	0.151	0.161	0.05	Normal
4	B_2	26	0.146	0.161	0.05	Normal
5	A_1B_1	13	0.197	0.234	0.05	Normal
6	A_2B_1	13	0.212	0.234	0.05	Normal
7	A_1B_2	13	0.197	0.234	0.05	Normal
8	A_2B_2	13	0.170	0.234	0.05	Normal

2. Homogeneity Testing

Having done the homogeneity testing, the writer needs to find out whether the data are homogeneous. This test is important because homogeneity of the data shows that the population is well-formed. It is gained that the value of the chi square observation is 2.115 while the table value of the chi square for $df = 3$ at the level of significance $\alpha = 0.05$ is 7.81. Because χ_o^2 is lower than χ_t^2 , it can be summed up that the sample taken from homogeneous population.

Table 4.10. The Homogeneity Test

Sample	df	$\frac{1}{df}$	Si^2	$\log Si^2$	$(df)\log Si^2$
A ₁ B ₁	12	0.0833	0.19	-0.72655	-8.718642
A ₂ B ₁	12	0.0833	0.3	-0.52567	-6.30806
A ₁ B ₂	12	0.0833	0.41	-0.38464	-4.615723
A ₂ B ₂	12	0.0833	0.39	-0.41353	-4.962337
	48		0.32		-24.60476

$$\begin{aligned}
 \chi_o^2 &= (In10)\{B - \sum(n_i - 1)\log s_i^2\} \\
 &= 2.303 (-23.7 + 24.60) \\
 &= 2.303 (0.91866) \\
 &= 2.115
 \end{aligned}$$

Based on the result of calculation above, χ_o^2 (2.115) is lower than χ_t^2 at the level of significance (α) 0.05 (7.815). Because $\chi_o^2 < \chi_t^2$ (2.115 < 7.815), the sample is homogeneous.

C. Hypothesis Testing

The function of hypothesis test here is to know whether the null hypothesis (Ho) is rejected or accepted. Multifactorial Analysis of Variance (ANOVA) is used to test the hypothesis. Statistically, the Ho (null hypothesis) is rejected if Fo is higher than Ft ($F_o > F_t$). The data analysis by using ANOVA can be summed up as follows:

Table 4.11. The Summary of a 2x2 Multifactor Analysis of Variance (ANOVA)

Source of variance	SS	df	MS	F _o	F _{t(0.05)}	Meaning
Between columns	3.2	1	3.2	9.968	4.00	significant
Between rows	3.5	1	3.5	10.902	4.00	significant
Columns by rows (interaction)	23.69	1	23.69	73.791	4.00	significant
Between group	45.81	3	10.13			
Within group	30.4	48	0.321			
Total	15.41	51				
				F _o > F _t =		significant

Table 4.12. Table of Mean Score

Statistic	Media/Motivation	A ₁	A ₂	Sum
\bar{X}	B ₁	9.65	7.78	8.71
\bar{X}	B ₂	7.8	8.63	8.22
\bar{X}	Sum	8.73	8.21	8.47

From the summary of 2x2 Multifactor Analysis of Variance (ANOVA) above, it can be concluded as follows:

1. F_o between columns (9.968) is higher than F_t (0.5) (4.00). The difference between students taught using vocabra game and those taught using crossword game is significant. Furthermore, it can be concluded that teaching media differ significantly from one another in their effect on vocabulary mastery. Therefore, Null Hypothesis (H_o) which states that there is no significant difference of effect on the students' vocabulary mastery between those who are taught using vocabra game and those who are taught using crossword, is

rejected. Based on the computation result, the mean score of the students who are taught using vocabra game (8.73) is higher than that of those who are taught using crossword game (8.21). Thus, it can be concluded that vocabra game is more effective than crossword game in teaching vocabulary.

2. F_o between rows (10.902) is higher than F_t (0.5) (4.00). The difference between the students having high learning motivation and those having low learning motivation is significant. Furthermore, it can be concluded that the difference between vocabulary mastery of those having high learning motivation and that of those having low learning motivation is significant. Therefore, Null Hypothesis H_o which states that there is no significant difference of effect on the students' vocabulary mastery between those who have high motivation and those who have low motivation, is rejected. Based on the computation result, the mean score of the students who have high motivation (8.71) is higher than that of those who have low motivation (8.22). Thus, it can be concluded that the students who have high motivation have better vocabulary mastery than those who have low motivation.
3. F_o interaction is (73.791) is higher than F_t (0.5) (4.20). There is an interaction between the two variables, teaching media and learning motivation. Furthermore, it means that the effect of teaching media on vocabulary mastery depends on the level of students' learning motivation. Therefore, Null Hypothesis H_o which states there is no interaction between student's motivation and teaching materials, is rejected.

After that, the writer needs to do Tukey testing to test the difference of the mean of each group. In Tukey test, q is found by dividing the difference between the means by the square root of the ratio of the within group variation and the sample size.

Table 4.13. The Tukey Test

Between Group	q_o	$q_t (0.05)$	Meaning
$q_1 (A_1 - A_2)$	4.68	2.89	significant
$q_2 (B_1 - B_2)$	4.41	2.89	significant
$q_3 (A_1B_1 - A_2B_1)$	11.9	3.06	significant
$q_4 (A_2B_2 - A_1B_2)$	5.282	3.06	significant
$q_o > q_t = \text{significant}$			

1. Comparing two means between columns (A_1 and A_2), q_o is 4.68. The value of q_t for $\alpha = 0.05$ and $n = 26$ is 2.89. Because q_o (4.68) is higher than q_t (2.89), vocabra game differs significantly from crossword game for teaching vocabulary. The mean score of students who are taught using vocabra game (8.73) is higher than that of those who are taught using crossword game (8.21), so vocabra game is more effective than crossword game for teaching vocabulary.
2. Comparing two means between rows (B_1 and B_2), q_o is 4.41. The value of q_t for $\alpha = 0.05$ and $n = 26$ is 2.89. Because q_o (4.41) is higher than q_t (2.89), the students who have high learning motivation are significantly different in vocabulary mastery from the students who have low motivation. The mean score of students having high motivation (8.71) is higher than that of those who have low motivation (8.22), so the students who have high learning motivation have better vocabulary mastery than the students who have low motivation.
3. Comparing two means between cells (A_1B_1 and A_2B_1), q_o is 11.9. The value of q_t for $\alpha = 0.05$ and $n = 13$ is 3.06. Because q_o (11.9) is higher than q_t (3.06) vocabra game differs significantly from crossword game for teaching vocabulary for students having high learning motivation. The mean score of students having high motivation who are taught using vocabra game (9.65) is higher than that of those who are taught using crossword game (7.78), so

vocabra game is more effective than crossword game for teaching vocabulary for students having high motivation.

4. Comparing two means between cells (A_1B_2 and A_2B_2), q_0 is 5.282. The value of q_t for $\alpha = 0.05$ and $n = 13$ is 3.06. Because q_0 (5.282) is higher than q_t (3.06) vocabra game differs significantly from crossword game for teaching vocabulary for students having low learning motivation. The mean score of students having low motivation who are taught using crossword game (8.63) is higher than those who are taught using vocabra game (7.80), so crossword game is more effective than vocabra game for teaching vocabulary for students having low motivation.
5. Based on the conclusion of number 3 and 4, there is an interaction between teaching media (vocabra game and crossword game) and the students' motivation on the students vocabulary mastery, that is vocabra game is more effective than crossword game for teaching vocabulary to students having high motivation and crossword game is more effective than vocabra game for teaching vocabulary to students having low motivation.

D. Discussion

First, Bakhsh, S. A., (2016) in his journal about using games as a tool in teaching vocabulary to young learners. He said that games are effective tools when devised to explain vocabularies and they make it easier to remember their meanings. Uzun et al. (2013) in the journal about developing and applying a foreign language vocabulary learning and practicing game through the effect of voca word. They summarized that Voca word is the name of this game. It is designed as a board game that is played quite similarly to one of world's famous games, monopoly. The main difference of this game is that it focuses on learning and practicing the vocabulary in a foreign language. They proved in their qualitative and quantitative study that games offer to unify interests and needs. Using game through Voca Word is able to develop and it is easy to apply for foreign language in learning vocabulary. The students also enjoy to practice using

simple game through Voca Word. Neville et al. (2009) says that games are learner-centered which is a feature that is valued and encouraged by most educators. Gaming creates an environment where the learners learn without the interference of the teacher, which provides them with more time for practice, and create anxiety-free condition as they are left on their own and not judged. They believed that games could explore the foreign learners to develop in learning vocabulary and apply them with voca word. Okaz (2015) in his journal about lesson plan – online games to teach vocabulary to young learners. He conducted that several techniques, such as flashcard, dictionaries, and verbal explanation as well as games can be used while presenting and recycling new language items, yet the lesson tend to be tedious and laborious for both teacher and students. The online activities converted students' energy into a meaningful learning experience and help them associate what they have learned. Online game also created an anxiety-free learning environment. In addition the other research taking perceptions of the use of digital letter games for language learning was also undertaken by Bianco, et al., (2016). They proved that the use of digital letter games for language learning can enhance learners to play a magic word for kids. They feel fun and want to play it again like a magic. Learning games engage students and then motivate them to interact with the topic. This interaction drives players to demonstrate their understanding of the topic in a friendly competition against themselves, other players, and the time and scoring standards. Moreover, during this play, players practice the social skills of communication, collaboration, and following instructions, as well as cognitive skills such as problem solving and critical thinking. Games help and encourage many learners to sustain their interest and work. Games also help the teacher to create in which the language is useful. The learners want to take part and in order to do so must understand what others are saying or have written, and they must speak or write in order to express their own point of view or give information. Furthermore, Aslanabadi & Rasouli (2013) proved the effect of games on improvement of Iranian EFL vocabulary knowledge in kindergartens. They divided the learners into the experimental group (giving an online language teaching game taken

from: <http://anglomaniacy.pl>) and the control group (giving regular teaching). The result with the experimental group was superior to those of the control group. Games not only bring fun to the class, but also they motivate the students and build their confidence. The result of the study were analyzed, using (T-test). The study indicated that there are statistically significant differences in mean score of vocabulary test in favor of the experimental group in the post test application. Chou, Mu-hsuan (2014) in his journal about assessing English vocabulary and enhancing young English as a Foreign Language (EFL) learners' motivation through games, songs, and stories. Research on teaching and assessing English in primary school education is relatively new compared with research on other levels of education in Taiwan. The present study was investigated the degree to which games, songs, and stories helped increase primary schools pupils' English vocabulary size and encouraged learning in an intensive English study. The result showed that games, songs, and stories had a positive effect on learning and increasing the pupils' English vocabulary.

Thus, the writer concluded that using games in mastering vocabulary for English young learners gave positive effect. They felt fun, comfortable, and interested in learning vocabulary. The teacher could engage between teaching media using game and students' motivation to goal the effectiveness in mastering vocabulary. The English young learners were also motivated when they got games as a teaching media, they felt confident to get good score after they did the test.

1. Vocabra game is more effective than crossword game to teach vocabulary.

The first hypothesis test result shows that there is a significant difference of effect on the student's vocabulary mastery between vocabra game and crossword game.

The use of vocabra game in teaching vocabulary entails good things that can stimulate students to learn vocabulary. It allows a variety of media (drawing, vocabulary bee, categories, selling it and dialogue) to be learnt on daily work book (LKS), magazine or newspaper. What makes media even

more powerful is that it also entails various media. That means that media resources can make the students powerfully acquire new words from media around them. According to Rider (2003, p. 10) there are some advantages of vocabra game in teaching vocabulary: (1) The students feel so confident to acquire new words by various Vocabra Game types in learning vocabulary; (2) The teacher can encourage the students to choose various types of vocabra game. It makes the teaching and learning process in vocabulary mastery easy to acquire new words for students; (3) The students start becoming aware to acquire new words, because in teaching and learning vocabulary, the students do not realize that to study vocabulary is available around living, such as drawings, dialogues, writing poetry or newspaper captions; (4) The students are so excited. Vocabulary study has become such a positive thing in the classroom. Vocabulary study has been successful when the students start defining new vocabulary words with vocabulary. The students are free to use their imagination in learning vocabulary, for example using drawing to match the word meaning with the picture; and (5) The students get a chance to do well, and make them smiling to use the various vocabra games.

Moreover, teaching media using crossword game tends to make the students passive. It makes the students bored to learn vocabulary, because there is only one media. We know that young learners need to have more interesting media than just one media to make young learners stay in the class room to join the material. According to Gerlach (1980, p. 277), there are some weaknesses of crossword game in teaching and learning vocabulary process, such as: (1) Students pay attention to the crossword game more than on learned material, it will make the students bored; (2) It takes time and costs much to provide attractive crossword game; (3) Small and unclear crossword game may arouse problems in the teaching learning process since the students may misunderstand about the crossword puzzle; and (4) It makes the students bored to do the assignment.

From the aforementioned description above, it can be concluded that, there is a significant difference of effect on the student's vocabulary mastery between vocabra game and crossword game and using vocabra is more effective than crossword in teaching vocabulary.

2. The students who have high motivation have better vocabulary mastery than those who have low motivation.

Motivation is one key to be successful in learning. Students who have high motivation can receive the material well. High motivation toward the material strongly effects the success of learning vocabulary and, surely it can effect the students' vocabulary mastery. Students who have high motivation usually tend to have high curiosity. By high motivation, students will have hard effort to achieve their success. Davis (1967) states that high motivation is a target of an individual to get positive incentives. Razik and Swanson (1995, p. 274) as cited in Stanford state that high motivated person is a person who has high intension to react or to respond something as a positive goal. Weiner in Sri Esti Wuryani (2002, p. 355) says that high motivated students are the students who stay longer to do the assignment in the class in order that to get better achievement in the future. Motivated individuals will involve wholeheartedly in the teaching-learning process and they will have an intention to learn more.

Moreover, students who have low motivation tend to be passive recipients of knowledge, they only receive what teacher said. They always depend on someone else, don't try hard, give up easily in the face of challenge, and don't have desire to improve their competencies. Students who have low motivation tend to be discouraged to participate or involve in learning activities, lazy to learn, get bored easily, and they don't feel pleasure in classroom. If it consistently occurs, the student's competence will sharply decrease. It is stated by Mitchell in Law and Glover (2000, p. 56), the degree to which a student engages in certain specified behaviors depends so much on whether his motivation is high or low. Davis (1967) states that low motivation

is a target of an individual to get negative incentives, because she/he has low power or low intension to reach the goal. Weiner in Sri Esti Wuryani (2002, p. 355) says that low motivated students are the students who do not stay longer to do the assignment in the class, because they have no goal for better achievement in the future. It is easy to assume that failure in any task due simply to the fact that someone is not motivated.

Thus, high motivated students have better achievement in learning vocabulary mastery than low motivated students.

3. There is an interaction effect between teaching media (vocabra game and crossword game) and learning motivation on the students' vocabulary mastery.

The use of vocabra game in teaching vocabulary can motivate the students to learn. It can enable them to actively participate in learning activities. Learning can be fun with various media. The use of vocabra game for teaching vocabulary can be presented by variety of learning tasks. Therefore, the students can be more encouraged, stimulated, and not feel bored in learning vocabulary. It is stated by Rider (2003, p. 10), there are some advantages of using vocabra game in teaching vocabulary: (1) The students feel so confident to acquire new words by various Vocabra Game types in learning vocabulary; (2) The teacher can encourage the students to choose various types of vocabra game. It makes the teaching and learning process in vocabulary mastery easy to acquire new words for students; (3) The students start becoming aware to acquire new words, because in teaching and learning vocabulary, the students do not realize that to study vocabulary is available around living, such as drawings, dialogues, writing poetry or newspaper captions; (4) The students are so excited. Vocabulary study has become such a positive thing in the classroom. Vocabulary study has been successful when the students start defining new vocabulary words with vocabulary. The students are free to use their imagination in learning vocabulary, for example

using a picture to match the meaning in drawing; and (5) The students get a chance to do well, and make them smiling to use the various vocabra games.

High motivated students using vocabra game have better vocabulary mastery in learning vocabulary because there are various media in vocabra game. The students would stay longer in the classroom and to do assignment. Weiner in Sri Esti Wuryani (2002, p. 355) says that high motivated students are the students who stay longer to do the assignment in the class in order to get better achievement in the future. Motivated individuals will involve wholeheartedly in the teaching-learning process and they will have an intention to learn more. So, high motivated students using vocabra game have better vocabulary mastery than using crossword game.

The use of crossword game tends to make students bored, because there is only one media. Crossword game is not simple media for teacher who makes this media because the teacher needs to give more idea and it takes long time to provide it in teaching and learning process for vocabulary mastery. According to Gerlach (1980, p. 277), there are some weaknesses of crossword game in teaching and learning vocabulary process, they are: (1) Teacher should avoid using crossword puzzle attacking more attention to them than to the activity in teaching vocabulary; (2) She or He also should control the students' activities including their attention during the teaching learning process; (3) The teacher should make or choose attractive simple crossword game to avoid wasting time and money in teaching vocabulary; and (4) The teacher should make or choose big and clear enough crossword puzzle in order to avoid misunderstanding about the crossword game in teaching vocabulary.

Low-motivated students are passive in joining activities and have low attention to the subject. They cannot elaborate their critical thinking, ideas, and arguments in vocabulary mastery. In this case, they cannot help themselves from an intention to learn more and more. Disaffected students are passive, do not try hard, and give up easily in the face of challenges. They can be bored, depressed, and anxious to stay in the class room to do the assignment or even

angry about their presence in the classroom. Low motivation is suitable for the students who use crossword game because they want to stay in the class room for one media only. Weiner in Sri Esti Wuryani (2002, p. 355) says that low motivated students are the students who do not stay longer to do the assignment in the class, because they have no goal for better achievement in the future. It is easy to assume that failure in any task due simply to the fact that someone is not motivated. Therefore, crossword game is more effective than vocabra game to teach vocabulary for the students who have low motivation.

From the aforementioned description above, it can be concluded that there is interaction between teaching media and students' motivation for teaching vocabulary.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS

The discussion of the finding has been presented in the previous chapter. This chapter presents the conclusion, implication, and suggestion.

A. Conclusion

Having done the result of the study, research findings can be drawn as follows:

1. Vocabra game is more effective than crossword game in teaching vocabulary mastery to the fifth year students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.
2. The students having high motivation have better vocabulary mastery using vocabra game than the students having low motivation using crossword game.
3. There is an interaction between teaching media (vocabra game and crossword game) and the students' motivation to teach vocabulary that is vocabra game is more effective than crossword game for teaching vocabulary to students having high motivation and crossword game is more effective than vocabra game for teaching vocabulary to students having low motivation.

From the research findings, it can be concluded that the vocabra game is effective teaching media for teaching vocabulary to the fifth year students of SDIT Sabilul Huda Cirebon in the academic year of 2018/2019.

B. Implications

The use of vocabra game which is really selected, will give the students real experience in class. It can encourage students to actively participate in learning process. Besides, using this media the students will be motivated to learn vocabulary, so that their vocabulary can be improved optimally. In applying vocabra game, teacher should really use it optimally, and consider the students' need in media, how to select media, and how to present them effectively so that it

can achieve optimum result. Teaching steps of vocabra game in teaching vocabulary are: (1) Explain vocabra game to the students. It provides a description, explanation, or example of vocabra game. First, a teacher should provide students with information about the meaning of vocabra game. There are a number of different ways that teachers can also help students build their initial understanding of the vocabra game meaning or even types. Teachers can tell a story using the term, drawing, use video or computer images as a source of information, use current events to connect the term to something familiar, describe their own mental pictures of the term, find or create pictures that exemplify the term. It will help students how to pronounce the word when the teacher tells that story and of course how to spell the letter of some words; (2) Sound, meaning, and repetition for memorizing and testing. In this step, the teacher can say the word two or three times, pronounce and spell it clearly, then give the meaning of the word. There are some media in vocabra games to study the meaning, spelling, and pronouncing, such as: oral stories, acting out meanings, dialogues, drawings, categories, a novel approach, sell it, newspaper captions, etc. In this part, the students are able to spell and pronounce the words and get the meaning of the words; (3) Written form for testing in the word. In this step, the teacher can ask student to use the word in a sentence or arrange the word to be a correct sentence. In the types of vocabra game, the students can apply dialogues or oral stories. In this part, the students are able to study how to use the words; (4) Discussing, refining, and reflecting. The teacher can summarize by giving a question or statement for the feedback to end the study about using vocabra game related to the topic in teaching vocabulary.

C. Suggestions

From the research findings, the writer intends to propose some suggestions which are addressed to the teacher, students, and other researchers.

1. For the teachers

- a. In order to improve the student's vocabulary mastery at elementary school, English teachers are suggested to apply vocabra game as a gamification.

- b. Teachers are suggested to be more creative and innovative in creating various kinds of interesting learning tasks which accompany the media, so that the students will be more active and encouraged to learn and they don't get bored easily.
- c. Teachers are suggested to understand more a distinct character of their students and their competencies, so that they are able to find a good way to stimulate or motivate their students easily.

2. For the Students

- a. Ten year-old students of the fifth grade are suggested to eliminate their negative opinion about English lesson, and they are suggested to like it.
- b. Ten year-old students of the fifth grade are suggested to eliminate their fear in making mistakes in learning process, because making mistakes is a part of learning.
- c. Ten year-old students of the fifth grade are suggested to keep learning new vocabulary inside or outside classroom for the sake of improving their vocabulary mastery.

3. For the Other Researchers

For other researchers who intend to conduct the research more detail about the effect of using vocabra game for teaching vocabulary, the writer hopes that the research findings can be used as a starting points for the future researchers who have the same problems and this research can be utilized as reference. This research still has disadvantage based on the teaching step that it can be other relevant and suitable teaching method like suggestopedia, SCL (Student Center Learning) or TBL (Task Based Learning) or any other teaching methods means that to make the English young learners can explore more in mastering vocabulary even though young learners still need a help from the teacher guiding the English step in learning or mastering vocabulary.

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Appendix 1. Lesson Plan for Experimental Class

Lesson Plan Meeting 1 & 2 (Experimental Class)

School : SDIT Sabilulhuda Cirebon

Subject : English

Language Component : Vocabulary

Class/Semester : V (Five) / I

Theme : Public Services

Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to express simple instruction and information, and to understand simple short functional text.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to do something and giving guidance
2. Reading ask for and give clarification phrase, including giving example to do something and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to do something and giving guidance
4. Writing ask for and give clarification phrase, including giving example to do something and giving guidance

III. Indicator

1. Pronouncing the words about "public services"
2. Finding the meaning of words about "public services"
3. Spelling the words of about "public services" correctly
4. Using the words in sentences for giving guidance

IV. Learning Media

Vocabra game (printed media)

V. Learning Material

Terlampir (pertemuan ke - 1 dan pertemuan ke - 2)

VI. Teaching Technique

Direct Instruction

VII. Learning Scenario

Pertemuan ke-1

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, and repetition for memorizing and testing
Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengualangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Sell it
Pada jenis vocabra game ini guru meminta siswa untuk membayangkan tentang periklanan, pemasaran, atau topik bahasan lain, dimana pada kegiatan ini siswa diminta untuk mencocokkan tempat dengan aktivitas (aspect of meaning).
 2. Category
Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “fasilitas umum” (aspect of pronouncing)
 3. Vocabulary bee
Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan present tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-2

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengualangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Sell it
 Pada jenis vocabra game ini guru meminta siswa untuk membayangkan tentang periklanan, pemasaran, atau topik bahasan lain, dimana pada kegiatan ini siswa diminta untuk mencocokkan tempat dengan aktivitas (aspect of meaning).
 2. Category
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “fasilitas umum” (aspect of pronouncing)
 3. Vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan present tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

VIII. Learning Source

Vocabra Game, “public services”

IX. Assessment

- 1) Type of assessment : formative
- 2) Technique of assessment : written test
- 3) Tool of assessment : test instrument of written and oral test
- 4) Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke - 1

A. Aspect of meaning

Match the places to the activities!

1. Bank
2. Bus station
3. Supermarket
4. Inn
5. School
6. Restaurant
7. Library
8. Museum
9. Stadium
10. Bookstore

People can see historical things here
People can read many books here
People do sports here
People have food or party here
All buses go to this place
People save their money in this place
People buy books or magazines here
People can stay for several days here
Students can get the knowledge here
People can buy many things in this place

B. Aspect of pronunciation

Follow the sound of words that you hear from the teacher based on the categories of public service!

No.	The words about public services	Pronunciation
1.	Bank	UK /bəŋk/ US /bəŋk/
2.	Bus station	UK /'bʌs ,steɪ.ʃən/ US /'bʌs ,steɪ.ʃən/
3.	Supermarket	UK /'suː.pə.mɑː.kɪt/ US /'suː.pə.mɑːr.kɪt/
4.	Inn	UK /ɪn/ US /ɪn/
5.	School	UK /sku:l/ US /sku:l/
6.	Restaurant	UK /'res.trɒnt/ US /'res.tə.rɑːnt/
7.	Library	UK /'laɪ.brər.i/ US /'laɪ.brer.i/
8.	Museum	UK /mjuː'ziː.əm/ US /mjuː'ziː.əm/
9.	Stadium	UK /'steɪ.di.əm/ US /'steɪ.di.əm/
10.	Bookstore	US /'bʊk.stɔːr, -stɔːr/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. l-o-c-h-s-o
2. y-a-r-i-l-r-b
3. s-a-u-r-t-a-n-t-e-r
4. s-u-m-u-e-m
5. m-i-u-d-t-a-s

D. Aspect of using words

Make sentences from these words!

1. school
2. library
3. restaurant
4. museum
5. stadium

Pertemuan ke – 2

A. Aspect of meaning

Match the places to the activities!

1. Office
2. Post office
3. Hospital
4. Drugstore
5. Town square
6. Bus stop
7. Cinema
8. Market
9. Bakery
10. Gas station

People can watch the film in a wide screen here
The place is used for community gatherings
People can buy vegetable, fruit and grocery
People can send their letter here
All buses stop to carry passengers to this place
People work in this place
People buy medicine or drug here
Doctors treat sick people here
People can buy many cakes here
People can fill petroleum to the tank for fuel here

B. Aspect of pronouncing

Follow the sound of words that you hear from the teacher based on the categories of public service!

No.	The words about public services	Pronunciation
1.	Office	UK /'ɒf.ɪs/ US /'ɑː.fɪs/
2.	Post office	UK /'pəʊst ,ɒf.ɪs/ US /'poʊst ,ɑː.fɪs/
3.	Hospital	UK /'hɒs.pɪ.təl/ US /'hɑː.spɪ.təl/
4.	Drugstore	UK /'drʌg.stɔːr/ US /'drʌg.stɔːr/
5.	Town square	UK / taʊn skweər/ US / taʊn skwer/
6.	Bus stop	UK /'bʌs ,stɒp/ US /'bʌs ,stɑːp/
7.	Cinema	UK /'sɪn.ə.mə/ US /'sɪn.ə.mə/
8.	Market	UK /'mɑː.kɪt/ US /'mɑːr.kɪt/
9.	Bakery	UK /'beɪ.kəri/ US /'beɪ.kə.i/
10.	Gas station	UK /'gæs ,steɪ.ʃən/ US /'gæs ,steɪ.ʃən/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. l-i-a-t-s-o-p-**h**
2. g-e-r-o-s-t-u-r-**d**
3. a-r-y-k-e-**b**
4. a-n-e-m-i-**c**
5. c-i-e-f-**o-f**

D. Aspect of using word

Make sentences from these words!

1. hospital
2. drugstore
3. bakery
4. cinema
5. office

Lesson Plan
Meeting 3 & 4
(Experimental Class)

School : SDIT Sabilulhuda Cirebon
Subject : English
Language Component : Vocabulary
Class/Semester : V (Five) / I
Theme : things in the house
Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to express simple instruction and information, and to understand simple short functional text.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to ask for and give an agreement, and giving guidance
2. Reading ask for and give clarification phrase, including giving example to ask for and give an agreement, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to ask for and give an agreement, and giving guidance
4. Writing ask for and give clarification phrase, including giving example to ask for and give an agreement, and giving guidance

III. Indicator

1. Pronouncing the words about "things in the house"
2. Finding the meaning of words about "things in the house"
3. Spelling the words of about "things in the house" correctly
4. Using the words in sentences for giving guidance

IV. Learning Media

Vocabra game (printed media)

V. Learning Material

Terlampir (pertemuan ke – 3 dan pertemuan ke – 4)

VI. Teaching Technique

Direct Instruction

VII. Learning Scenario

Pertemuan ke-3

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, repetition for memorizing, and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengualangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Dialog
 Pada jenis vocabra game ini guru meminta siswa untuk mengisi jawaban yang paling tepat dari empat pilihan jawaban yang tersedia dalam kata bahasa Inggris dari sebuah percakapan pendek tentang benda-benda yang ada di rumah (aspect of meaning).
 2. Categories
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “benda-benda yang ada di rumah” (aspect of pronouncing).
 3. vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan ekspresi ask for and give an agreement dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
4. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-4

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengulangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Dialog
 Pada jenis vocabra game ini guru meminta siswa untuk mengisi jawaban yang paling tepat dari empat pilihan jawaban yang tersedia dalam kata bahasa Inggris dari sebuah percakapan pendek tentang benda-benda yang ada di rumah (aspect of meaning).
 2. Categories
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “benda-benda yang ada di rumah” (aspect of pronouncing).
 3. vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan ekspresi ask for and give an agreement dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

VIII.Learning Source

Vocabra Game, “things in the house”

IX. Assessment

- 1) Type of assessment : formative
- 2) Technique of assessment : written test
- 3) Tool of assessment : test instrument of written and oral test
- 4) Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke - 3

A. Aspect of meaning

Choose the correct answer based on the bracket!

1. Ciko : Look at the.....! The smoke moves up into the air from this pipe.
May : yes, it does.
a. kitchen b. pool c. gate d. chimney
2. Desi : The house has big.....We can enter to the garden like a door.
Andy : yes, it does.
a. kitchen b. pool c. gate d. chimney
3. Ciko : Look at the.....! We can eat food here.
May : yes, it does.
a. living room b. bedroom c. bathroom d. dining room
4. Desi : The house has a beautiful.....We can cover our window from sun light or dust.
Andy : yes, it does.
a. curtain b. floor c. window d. door
5. Jenn : The house has dry.....My mother likes cooking in this place.
Jack : yes, it does.
a. kitchen b. pool c. gate d. chimney
6. Gea : Does your house has a.....? It can be a border or protection for our garden or house.
Tom : yes, it does.
a. fence b. gate c. garage d. roof
7. Desi : The house has long.....You can go up and go down by this step.
Andy : yes, it does.
a. floor b. carpet c. staircase d. carport
8. Budi : The house has a beautiful.....You can go to sleep in this room.
Roy : yes, it does.
a. living room b. bedroom c. bathroom d. dining room
9. Gea : Does your house has a.....? The people usually swim in this place.
Tom : yes, it does.
a. kitchen b. pool c. gate d. chimney
10. Andi : Look at the.....! It is clean. The people usually take a shower here.
Ali : yes, it is.
a. living room b. bedroom c. bathroom d. dining room

B. Aspect of pronunciation

Follow the sound of words that you hear from the teacher based on the categories of things in the house!

No.	The words about things in the house	Pronunciation
1.	Chimney	UK /'tʃɪm.ni/ US /'tʃɪm.ni/
2.	Gate	UK /geɪt/ US /geɪt/
3.	Dining room	UK /'daɪ.nɪŋ ˌru:m/ US /'daɪ.nɪŋ ˌru:m/
4.	Curtain	UK /'kɜ:.tən/ US /'kɜ:.tən/
5.	Kitchen	UK /'kɪtʃ.ən/ US /'kɪtʃ.ən/
6.	Fence	UK /fens/ US /fens/
7.	Staircase	UK /'steə.keɪs/ US /'ster.keɪs/
8.	Bedroom	UK /'bed.ru:m/'bed.rʊm/ US /'bed.ru:m/'bed.rʊm/
9.	Pool	UK /pu:l/ US /pu:l/
10.	Bathroom	UK /'bɑ:θ.ru:m/'bɑ:θ.rʊm/ US /'bæθ.ru:m/'bæθ.rʊm/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. T-e-g-a
2. N-e-t-h-i-c-k
3. n-e-f-e-c
4. n-i-a-r-t-u-c
5. l-o-p-o

D. Aspect of using words

Make sentences from these words!

1. gate
2. kitchen
3. fence
4. curtain
5. pool

Pertemuan ke – 4

A. Aspect of meaning

Choose the correct answer based on the bracket!

1. Jenn : The house has colorful.....This thick covering of soft material covers the floor
Jack : yes, it does.
a. curtain b. floor c. window d. door
2. Andi : Look at the.....! You can open the curtain and get a fresh air here.
Ali : yes, it is.
a. curtain b. floor c. window d. door
3. Gea : Does your house has a.....? My father usually park the car in my house.
Tom : yes, it does.
a. floor b. carpet c. staircase d. carport
4. Desi : The house has high.....You can see the horizontal surface like a roof inside your house.
Andy : yes, it does.
a. wall b. door c. ceiling d. garage
5. Andi : Look at the.....! It is clean. My mother usually sweeps here.
Ali : yes, it is.
a. floor b. carpet c. staircase d. carport
6. Intan : Look at the.....! I put my wall clock or photograph here.
Putri : yes, it is.
a. wall b. door c. ceiling d. garage
7. Desi : The house has big.....I always watch TV with my family here.
Andy : yes, it does.
a. living room b. bedroom c. bathroom d. dining room
8. Andi : Look at the.....! It has classic design. We can enter to the house in this chamber.
Ali : yes, it does.
a. wall b. door c. ceiling d. garage
9. Indra : Look at the.....! It is colorful. This place can protect our house from rainfall.
Rita : yes, it is.
a. fence b. gate c. garage d. roof
10. Ani : Does your house has a.....? The people usually keep a car in this building.
Adi : yes, it does.
a. wall b. door c. ceiling d. garage

B. Aspect of pronouncing

Follow the sound of words that you hear from the teacher based on the categories of things in the house!

No.	The words about things in the house	Pronunciation
1.	Carpet	UK /'kɑ:.pɪt/ US /'kɑ:r.pət/
2.	Window	UK /'wɪn.dəʊ/ US /'wɪn.doʊ/
3.	Carport	UK /'kɑ:.pɔ:t/ US /'kɑ:r.pɔ:rt/
4.	Ceiling	UK /'si:.lɪŋ/ US /'si:.lɪŋ/
5.	Floor	UK /flɔ:r/ US /flɔ:r/
6.	Wall	UK /wɔ:l/ US /wɑ:l/
7.	Living room	UK /'lɪv.ɪŋ ,ru:m/ US /'lɪv.ɪŋ ,ru:m/
8.	Door	UK /dɔ:r/ US /dɔ:r/
9.	Roof	UK /ru:f/ US /ru:f/
10.	Garage	UK /'gær.ɑ:ʒ/ /'gær.ɪdʒ/ US /gə'reɪʒ/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. t-e-p-a-r-**c**
2. r-o-**f**-o-l
3. f-o-**r**-o
4. l-a-**w**-l
5. r-o-**d**-o

D. Aspect of using words

Make sentences from these words!

1. carpet
2. floor
3. roof
4. wall
5. door

Lesson Plan
Meeting 5 & 6
(Experimental Class)

School : SDIT Sabilulhuda Cirebon
Subject : English
Language Component : Vocabulary
Class/Semester : V (Five) / I
Theme : flying kite
Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to express simple instruction and information, and to understand simple short functional text.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
2. Reading ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
4. Writing ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance

III. Indicator

1. Pronouncing the words about "flying kite"
2. Finding the meaning of words about "flying kite"
3. Spelling the words of about "flying kite" correctly
4. Using the words in sentences for giving guidance

IV. Learning Media

Vocabra game (printed media)

V. Learning Material

Terlampir (pertemuan ke - 5 dan pertemuan ke – 6)

VI. Teaching Technique

Direct Instruction

VII. Learning Scenario

Pertemuan ke-5

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, repetition for memorizing and testing
Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengualangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Dialog
Pada jenis vocabra game ini guru meminta siswa untuk mengisi jawaban yang paling tepat dari empat pilihan jawaban yang tersedia dalam kata bahasa Inggris dari sebuah percakapan pendek tentang kemah (aspect of meaning).
 2. Categories
Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “kemah” (aspect of pronouncing).
 3. vocabulary bee
Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan future tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-6

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, repetition for memorizing and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengulangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Dialog
 Pada jenis vocabra game ini guru meminta siswa untuk mengisi jawaban yang paling tepat dari empat pilihan jawaban yang tersedia dalam kata bahasa Inggris dari sebuah percakapan pendek tentang kemah (aspect of meaning).
 2. Categories
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “kemah” (aspect of pronouncing).
 3. vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan future tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

VIII. Learning Source

Vocabra Game, “flying kite”

IX. Assessment

- 1) Type of assessment : formative
- 2) Technique of assessment : written test
- 3) Tool of assessment : test instrument of written and oral test
- 4) Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke - 5

A. Aspect of meaning

Choose the correct answer based on the bracket!

1. Siska : What do you do here?
Tom : I connect all the ends of.....with the string.
a. stick b. knife c. kite d. butterfly
2. Jack : What do you do here?
Mita : I put the.....on the kite.
a. kite b. knife c. butterfly d. covering
3. Ali : What do you do here?
Desi : I use the.....to smoothen the bamboo sticks into small size.
a. bamboo b. butterfly c. stick d. knife
4. Kim : What do you do here?
Yuni : I decorate the.....
a. bamboo b. kite c. butterfly d. covering
5. Dini : What do you do here?
Desi : I tie the joint with the.....
a. string b. stick c. bamboo d. knife
6. John : What do you do here?
Anton : I shape the.....on kite.
a. knife b. stick c. string d. butterfly
7. Adit : What do you do here?
Anna : I make.....for the kite.
a. knife b. stick c. frame d. covering
8. Teacher : What do you do here?
Students : We cut.....with the saw.
a. knife b. stick c. string d. bamboo
9. Ali : What do you do here?
Jenn : I prepare the.....
a. knife b. bamboo c. material d. stick
10. Tom : What do you do here?
Jack : I fold the.....
a. paper b. bamboo c. knife d. string

B. Aspect of pronunciation

Follow the sound of words that you hear from the teacher based on the categories of flying kite!

No.	The words about camping	Pronunciation
1.	stick	UK /stɪk/ US /stɪk/
2.	covering	UK /'kʌv.ɪŋ/ US /'kʌv.ə.ɪŋ/
3.	knife	UK /naɪf/ US /naɪf/
4.	kite	UK /kaɪt/ US /kaɪt/
5.	string	UK /strɪŋ/ US /strɪŋ/
6.	butterfly	UK /'bʌt.ə.flai/ US /'bʌt.ə.flai/
7.	frame	UK /freɪm/ US /freɪm/
8.	bamboo	UK /bæm'bu:/ US /bæm'bu:/
9.	material	UK /mə'tɪə.ri.əl/ US /mə'tɪr.i.əl/
10.	paper	UK /'peɪ.pə/ US /'peɪ.pə/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. c-i-t-s-k
2. k-e-f-i-n
3. t-i-e-k
4. m-e-r-a-f
5. r-a-p-e-p

D. Aspect of using words

Make sentences from these words!

1. stick
2. knife
3. kite
4. frame
5. paper

Pertemuan ke – 6

A. Aspect of meaning

Choose the correct answer based on the bracket!

1. Siska : What do you do here?
Tom : I.....the kite.
a. fold b. decorate c. shape d. cut
2. Jack : What do you do here?
Mita : I.....the material.
a. put b. make c. connect d. prepare
3. Ali : What do you do here?
Desi : I.....the frame for the kite.
a. make b. put c. fold d. cut
4. Kim : What do you do here?
Yuni : I.....all the ends of sticks with the string.
a. put b. cut c. connect d. prepare
5. Dini : What do you do here?
Deni : I.....the bamboo with the saw.
a. put b. cut c. connect d. prepare
6. John : What do you do here?
Anton : I.....the joint with the string.
a. cut b. make c. put d. tie
7. Adit : What do you do here?
Anna : I.....the paper.
a. cut b. put c. fold d. tie
8. Teacher : What do you do here?
Student : I.....butterfly on kite.
a. tie b. cut c. shape d. fold
9. Ali : What do you do here?
Jenn : I.....the covering on kite.
a. cut b. put c. tie d. fold
10. Tom : What do you do here?
Jack : I.....the knife to smoothen the bamboo sticks into small size.
a. cut b. fold c. use d. make

B. Aspect of pronunciation

Follow the sound of words that you hear from the teacher based on the categories of flying kite!

No.	The words about camping	Pronunciation
1.	decorate	UK /'dek.ə.reɪt/ US /'dek.ər.ert/
2.	prepare	UK /prɪ'peə/ US /prɪ'per/
3.	make	UK /meɪk/ US /meɪk/
4.	connect	UK /kə'nekt/ US /kə'nekt/
5.	cut	UK /kʌt/ US /kʌt/
6.	tie	UK /taɪ/ US /taɪ/
7.	fold	UK /fəʊld/ US /foʊld/
8.	shape	UK /ʃeɪp/ US /ʃeɪp/
9.	put	UK /pʊt/ US /pʊt/
10.	use	UK /juːz/ US /juːz/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. u-c-t
2. t-e-i
3. u-p-t
4. s-e-u
5. k-a-m-e

D. Aspect of using words

Make sentences from these words!

1. cut
2. tie
3. put
4. use
5. make

Lesson Plan
Meeting 7 & 8
(Experimental Class)

School : SDIT Sabilulhuda Cirebon

Subject : English

Language Component : Vocabulary

Class/Semester : V (Five) / I

Theme : cooking

Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to express simple instruction and information, and to understand very simple description based on picture in the school's context.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
2. Reading ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
4. Writing ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance

III. Indicator

1. Pronouncing the words about "cooking"
2. Finding the meaning of words about "cooking"
3. Spelling the words of about "cooking" correctly
4. Using the words in sentences for giving guidance

IV. Learning Media

Vocabra game (printed media)

V. Learning Material

Terlampir (pertemuan ke - 7 dan pertemuan ke - 8)

VI. Teaching Technique

Direct Instruction

VII. Learning Scenario

Pertemuan ke-7

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengulangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Dialog
 Pada jenis vocabra game ini guru meminta siswa untuk mengisi jawaban yang paling tepat dari empat pilihan jawaban yang tersedia dalam kata bahasa Inggris dari sebuah percakapan pendek tentang ulang tahun (aspect of meaning).
 2. Categories
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “ulang tahun” (aspect of pronouncing).
 3. vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan future tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-8

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain vocabra game to the students.
 Pada langkah ini guru menjelaskan, menggambarkan, dan memberikan contoh tentang vocabra game dan jenis vocabra game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Setelah menerangkan pada langkah pertama, guru kemudian menggunakan salah satu jenis vocabra game sebagai media untuk mengajar di kelas untuk mengembangkan indikator berupa: arti, pengulangan untuk pengucapan, dan pelafalan. Salah satu media dalam tahap ini menggunakan media vocabra game berupa:
 1. Sell it
 Pada jenis vocabra game ini guru meminta siswa untuk membayangkan tentang periklanan, pemasaran, atau topik bahasan lain, dimana pada kegiatan ini siswa diminta untuk mencocokkan gambar tentang ulang tahun dengan kata yang tersedia (aspect of meaning).
 2. Category
 Pada langkah ini siswa diminta untuk membaca kata-kata yang diucapkan oleh guru berdasarkan kategori “ulang tahun” (aspect of pronouncing)
 3. Vocabulary bee
 Pada jenis vocabra game ini siswa diminta untuk merangkai huruf acak menjadi sebuah kata yang benar (aspect of spelling).
 - c. Written form for testing in the word
 Pada langkah ini siswa diminta untuk membuat kalimat berdasarkan kata yang tersedia. Pada salah satu jenis media yang menggunakan vocabra ini adalah vocabulary bee, dimana guru memandu siswa untuk membuat kalimat dengan menggunakan future tense dari hasil merangkai huruf menjadi sebuah kata sebelumnya (Aspect of using words).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

VIII.Learning Source

Vocabra Game, “cooking”

IX. Assessment

1. Type of assessment : formative
2. Technique of assessment : written test
3. Tool of assessment : test instrument of written and oral test
4. Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke - 7

A. Aspect of meaning

Fill the word given in the bracket with your best answer!

1. Siska : What do you do here?
Tom : I.....the onion.
a. crack b. stir c. serve d. chop
2. Mita : What are you doing here?
Jim : I.....mom in the kitchen.
a. cook b. drain c. pour d. help
3. Ali : What do you do here?
Desi : I.....the soup.
a. crack b. stir c. serve d. chop
4. Kim : What do you do here?
Yuni : I.....the coffee.
a. crack b. stir c. serve d. chop
5. Dini : What do you do here?
Desi : I.....the noodle.
a. cook b. drain c. pour d. help
6. Adit : What do you do here?
Anna : I.....the water.
a. add b. crack c. stir d. boil
7. Jack : What do you do here?
Mita : I.....the tea.
a. cook b. drain c. pour d. help
8. Kim : What do you do here?
Tom : I.....the eggs.
a. crack b. stir c. serve d. chop
9. Ali : What do you do here?
Jenn : I.....the rice.
a. cook b. drain c. pour d. help
10. John : What do you do here?
Anton : I.....the sugar.
a. add b. crack c. stir d. boil

B. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about cooking!

No.	The words about birthday	Pronunciation
1.	chop	UK /tʃɒp/ US /tʃɑ:p/
2.	help	UK /help/ US /help/
3.	serve	UK /sɜ:v/ US /sɜ:v/
4.	stir	UK /stɜ:ɪ/ US /stɜ:ɪ/
5.	drain	UK /dreɪn/ US /dreɪn/
6.	boil	UK /bɔɪl/ US /bɔɪl/
7.	pour	UK /pɔ:ɪ/ US /pɔ:ɪ/
8.	crack	UK /kræk/ US /kræk/
9.	cook	UK /kʊk/ US /kʊk/
10.	add	UK /æd/ US /æd/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. k-o-**c**-o
2. **c**-o-h-p
3. l-o-**b**-i
4. r-o-u-**p**
5. **s**-i-r-t

D. Aspect of using words

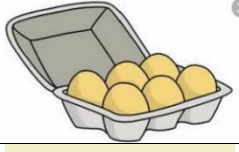


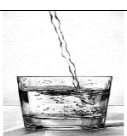

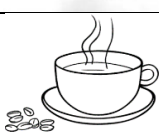




Make sentences from these words!

1. cook
2. chop
3. boil
4. pour
5. stir

Pertemuan ke – 8

A. Aspect of meaning

Match the word to the picture!

1.	coffee	
2.	onion	
3.	noodle	
4.	soup	
5.	mom	
6.	water	
7.	tea	
8.	rice	
9.	eggs	
10.	sugar	

B. Aspect of pronouncing

Follow the sound of words from the teacher that you hear about cooking!

No.	The words about birthday	Pronunciation
1.	coffee	UK /'kɒf.i/ US /'kɑ:.fi/
2.	onion	UK /'ʌn.jən/ US /'ʌn.jən/
3.	noodle	UK /'nu:.dʌl/ US /'nu:.dʌl/
4.	soup	UK /su:p/ US /su:p/
5.	mom	UK /mɒm/ US /mɑ:m/
6.	water	UK /'wɔ:.tə/ US /'wɑ:.tə/
7.	tea	UK /ti:/ US /ti:/
8.	rice	UK /raɪs/ US /raɪs/
9.	eggs	UK /egs/ US /egs/
10.	sugar	UK /'ʃʊg.ə/ US /'ʃʊg.ə/

C. Aspect of spelling

Arrange these jumbled letters into a correct word!

1. a-t-e
2. c-i-r-e
3. g-e-g-s
4. g-u-s-a-r
5. p-o-s-u

D. Aspect of using word

Make sentences from these words!

1. tea
2. rice
3. eggs
4. sugar
5. soup

Appendix 2. Lesson Plan for Control Class

Lesson Plan Meeting 1 & 2 (Control Class)

School : SDIT Sabilulhuda Cirebon

Subject : English

Language Component : Vocabulary

Class/Semester : V (Five) / I

Theme : Public Services

Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to understand and to express very simple instruction and information in school context.

II. Basic Competency

1. Listening respond to very simple instruction verbally for some places including giving the example to do something and giving guidance.
2. Reading respond to very simple instruction verbally for some places including giving example to do something and giving guidance
3. Pronouncing respond to very simple instruction verbally for some places including giving example to do something and giving guidance
4. Writing respond to very simple instruction verbally for some places including giving example to do something and giving guidance

III. Indicator

1. Pronouncing the words about "public services"
2. Finding the meaning of words about "public services"
3. Spelling the words about "public services" correctly
4. Using the words in sentences for giving guidance

IV. Learning Material

Terlampir (pertemuan ke – 1 dan pertemuan ke – 2)

V. Teaching technique

Direct Instruction

VI. Learning Media

Crossword game (printed media)

VII. Learning Source

Crossword game, “public services”

VIII. Learning Scenario

Pertemuan ke-1

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain crossword game to the students.
 Pada langkah ini guru menjelaskan tentang konsep mengisi crossword game dimana terdapat dua petunjuk, yaitu across untuk menyamping dan down untuk ke bawah pada setiap topik bahasan. Topik bahasan untuk pertemuan ke 1 ini tentang “public services” (fasilitas umum). Guru membagikan lembaran kertas pada siswa untuk mendemonstrasikan tentang fasilitas umum dengan menggunakan crossword game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Pada langkah ini, untuk mencari arti (aspect of meaning) guru meminta siswa untuk mengisi kata yang tepat berdasarkan petunjuk “across” menyamping dan “down” ke bawah. Setelah siswa mengisi kata yang tepat, siswa diminta mengeja huruf – huruf yang ditulis pada kotak across dan down (aspect of spelling). Kemudian setelah mengisi semua kata dengan tepat, guru meminta siswa untuk membaca semua kata (aspect of pronouncing).
 - c. Written form for testing in the word
 Pada langkah ini, guru memandu siswa untuk membuat kalimat dengan memberikan contoh pola kalimat dengan menggunakan present tense dari beberapa kata yang diambil dari hasil jawaban sebelumnya pada across atau down sesuai dengan kata yang diberikan oleh guru tentang fasilitas umum (aspect of using word).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

1. Type of assessment : formative
2. Technique of assessment : written test
3. Tool of assessment : test instrument of written and oral test
4. Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

(Septian Sudrajat, S.Pd.)

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about public services!

No.	The words about public services	Pronunciation
1.	Bank	UK /bəŋk/ US /bəŋk/
2.	Bus station	UK /'bʌs ,steɪ.ʃən/ US /'bʌs ,steɪ.ʃən/
3.	Supermarket	UK /'su: .pə ,mɑ: .kɪt/ US /'su: .pə ,mɑ: r.kɪt/
4.	Inn	UK /ɪn/ US /ɪn/
5.	School	UK /sku:l/ US /sku:l/
6.	Restaurant	UK /'res.trɒnt/ US /'res.tə.rɑ: nt/
7.	Library	UK /'laɪ.brər.i/ US /'laɪ.brer.i/
8.	Museum	UK /mju: 'zi: .əm/ US /mju: 'zi: .əm/
9.	Stadium	UK /'steɪ.di.əm/ US /'steɪ.di.əm/
10.	Bookstore	US /'bʊk stɔr, -stɔr/

D. Aspect of using words

Make sentences from these words!

1. school
2. library
3. restaurant
4. museum
5. stadium

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about public services!

No.	The words about public services	Pronunciation
1.	Office	UK /'ɒf.ɪs/ US /'ɑː.fɪs/
2.	Post office	UK /'pəʊst ,ɒf.ɪs/ US /'poʊst ,ɑː.fɪs/
3.	Hospital	UK /'hɒs.pɪ.təl/ US /'hɑː.spi.təl/
4.	Drugstore	UK /'drʌg.stɔːr/ US /'drʌg.stɔːr/
5.	Town square	UK /təʊn skweər/ US /təʊn skwer/
6.	Bus stop	UK /'bʌs ,stɒp/ US /'bʌs ,stɑːp/
7.	Cinema	UK /'sɪn.ə.mə/ US /'sɪn.ə.mə/
8.	Market	UK /'mɑː.kɪt/ US /'mɑːr.kɪt/
9.	Bakery	UK /'beɪ.kər.i/ US /'beɪ.kə.i/
10.	Gas station	UK /'gæs ,steɪ.ʃən/ US /'gæs ,steɪ.ʃən/

D. Aspect of using words

Make sentences from these words!

1. hospital
2. drugstore
3. bakery
4. cinema
5. office

Lesson Plan
Meeting 3 & 4
(Control Class)

School : SDIT Sabilulhuda Cirebon

Subject : English

Language Component : Vocabulary

Class/Semester : V (Five) / I

Theme : things in the house

Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to understand and to express very simple instruction and information in school context.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example for an agreement, and giving guidance
2. Reading ask for and give clarification phrase, including giving example for an agreement, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example for an agreement, and giving guidance
4. Writing ask for and give clarification phrase, including giving example for an agreement, and giving guidance

III. Indicator

1. Pronouncing the words about "things in the house"
2. Finding the meaning of words about "things in the house"
3. Spelling the words about "things in the house" correctly
4. Using the words in sentences for giving guidance

IV. Learning Material

Terlampir (pertemuan ke – 3 dan pertemuan ke – 4)

V. Teaching technique

Direct Instruction

VI. Learning Media

Crossword game (printed media)

VII. Learning Source

Crossword game, “things in the house”

VIII. Learning Scenario

Pertemuan ke-3

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajaran (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain crossword game to the students.
 Pada langkah ini guru menjelaskan tentang konsep mengisi crossword game dimana terdapat dua petunjuk, yaitu across untuk menyamping dan down untuk ke bawah pada setiap topic bahasan. Topik bahasan untuk pertemuan ke 3 ini tentang “things in the house” (benda-benda yang ada di rumah). Guru membagikan lembaran kertas pada siswa untuk mendemonstrasikan tentang benda-benda yang ada di rumah dengan menggunakan crossword game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Pada langkah ini, untuk mencari arti (aspect of meaning) guru meminta siswa untuk mengisi kata yang tepat berdasarkan petunjuk “across” menyamping dan “down” ke bawah. Setelah siswa mengisi kata yang tepat, siswa diminta mengecek huruf – huruf yang ditulis pada kotak across dan down (aspect of spelling). Kemudian setelah mengisi semua kata dengan tepat, guru meminta siswa untuk membaca semua kata (aspect of pronouncing).
 - c. Written form for testing in the word
 Pada langkah ini, guru memandu siswa untuk membuat kalimat dengan memberikan contoh pola kalimat dengan menggunakan bentuk ekspresi asking and giving an agreement dari beberapa kata yang diambil dari hasil jawaban sebelumnya pada across atau down sesuai dengan kata yang diberikan oleh guru tentang benda-benda yang ada di rumah (aspect of using word).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain crossword game to the students.

Pada langkah ini guru menjelaskan tentang konsep mengisi crossword game dimana terdapat dua petunjuk, yaitu across untuk menyamping dan down untuk ke bawah pada setiap topic bahasan. Topik bahasan untuk pertemuan ke 4 ini tentang “things in the house” (benda-benda yang ada di rumah). Guru membagikan lembaran kertas pada siswa untuk mendemonstrasikan tentang benda-benda yang ada di rumah dengan menggunakan crossword game.
 - b. Sound, meaning, and repetition for memorizing and testing

Pada langkah ini, untuk mencari arti (aspect of meaning) guru meminta siswa untuk mengisi kata yang tepat berdasarkan petunjuk “across” menyamping dan “down” ke bawah. Setelah siswa mengisi kata yang tepat, siswa diminta meneja huruf – huruf yang ditulis pada kotak across dan down (aspect of spelling). Kemudian setelah mengisi semua kata dengan tepat, guru meminta siswa untuk membaca semua kata (aspect of pronouncing).
 - c. Written form for testing in the word

Pada langkah ini, guru memandu siswa untuk membuat kalimat dengan memberikan contoh pola kalimat dengan menggunakan bentuk ekspresi asking and giving an agreement dari beberapa kata yang diambil dari hasil jawaban sebelumnya pada across atau down sesuai dengan kata yang diberikan oleh guru tentang benda-benda yang ada di rumah (aspect of using word).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

VIII. Assessment

- 1) Type of assessment : formative
- 2) Technique of assessment : written test
- 3) Tool of assessment : test instrument of written and oral test
- 4) Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

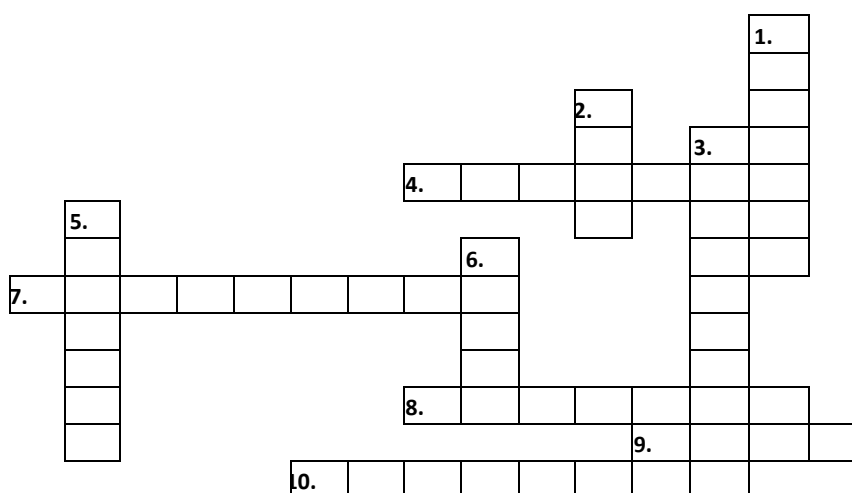
(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke – 3

A. Aspect of meaning and spelling

Fill the square based on the picture and clues for across and down which lead to the answers!



Across:		Down:	
4.	t-a-i-n-c-u-r	1.	n-e-y-c-h-i-m
7.	c-a-s-e-s-t-a-i-r	2.	t-e-g-a
8.	r-o-m-o-d-e-b	3.	g-i-n-m-o-r-o-d-i-n
9.	p-o-l-o	5.	c-h-e-n-k-i-t
10.	r-o-m-o-t-a-b-h	6.	n-e-c-e-f

B. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about things in the house!

No.	The words about things in the house	Pronunciation
1.	Chimney	UK /'tʃɪm.ni/ US /'tʃɪm.ni/
2.	Gate	UK /geɪt/ US /geɪt/
3.	Dining room	UK /'daɪ.nɪŋ ,ru:m/ US /'daɪ.nɪŋ ,ru:m/
4.	Curtain	UK /'kɜ:.tən/ US /'kɜ:.tən/
5.	Kitchen	UK /'kɪtʃ.ən/ US /'kɪtʃ.ən/
6.	Fence	UK /fens/ US /fens/
7.	Staircase	UK /'steə.keɪs/ US /'ster.keɪs/
8.	Bedroom	UK /'bed.ru:m// 'bed.rʊm/ US /'bed.ru:m// 'bed.rʊm/
9.	Pool	UK /pu:l/ US /pu:l/
10.	Bathroom	UK /'bɑ:θ.ru:m// 'bɑ:θ.rʊm/ US /'bæθ.ru:m// 'bæθ.rʊm/

C. Aspect of using words

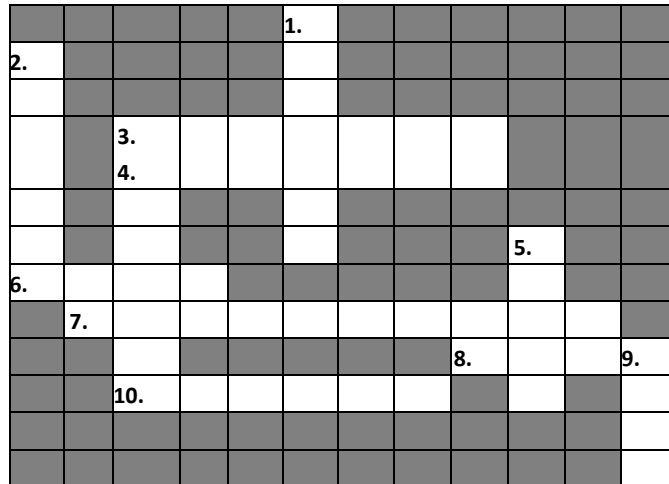
Make sentences from these words!

1. gate
2. kitchen
3. fence
4. curtain
5. pool

Pertemuan ke – 4

A. Aspect of meaning

Fill the square based on the clues for across and down which lead to the answers!



Across:		Down:	
3.	This place is like a house to place a car	1.	People dried their wet feet here
6.	People usually hang things like a clock here	2.	Wind can enter here
7.	People can gather with their family in this place	4.	People can see the upper interior house
8.	People can enter to their house here	5.	People walk here at home
10.	The building is used to keep a car	9.	People can protect their upper exterior by clay or metal from the weather

B. Aspect of spelling

While filling the square, please spelling each letter based on the correct answer!

1.	c	a	r	p	e	t														
2.	w	i	n	d	o	w														
3.	c	a	r	p	o	r	t													
4.	c	e	i	l	i	n	g													
5.	f	l	o	o	r															
6.	w	a	l	l																
7.	l	i	v	i	n	g	r	o	o	m										
8.	d	o	o	r																
9.	r	o	o	f																
10.	g	a	r	a	g	e														

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about things in the house!

No.	The words about things in the house	Pronunciation
1.	Carpet	UK /'kɑ:.pɪt/ US /'kɑ:r.pət/
2.	Window	UK /'wɪn.dəʊ/ US /'wɪn.doʊ/
3.	Carport	UK /'kɑ:.pɔ:t/ US /'kɑ:r.pɔ:rt/
4.	Ceiling	UK /'si:.lɪŋ/ US /'si:.lɪŋ/
5.	Floor	UK /flɔ:r/ US /flɒ:r/
6.	Wall	UK /wɔ:l/ US /wɑ:l/
7.	Living room	UK /'lɪv.ɪŋ ,ru:m/ US /'lɪv.ɪŋ ,ru:m/
8.	Door	UK /dɔ:r/ US /dɒ:r/
9.	Roof	UK /ru:f/ US /ru:f/
10.	Garage	UK /'gær.ɑ:ʒ/ /'gær.ɪdʒ/ US /gə'reɑ:ʒ/

D. Aspect of using words

Make sentences from these words!

1. carpet
2. floor
3. roof
4. wall
5. door

Lesson Plan
Meeting 5 & 6
(Control Class)

School : SDIT Sabilulhuda Cirebon
Subject : English
Language Component : Vocabulary
Class/Semester : V (Five) / I
Theme : flying kite
Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to understand and to express very simple instruction and information in school context.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
2. Reading ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance
4. Writing ask for and give clarification phrase, including giving example to ask for and give future plan, and giving guidance

III. Indicator

1. Pronouncing the words about "flying kite"
2. Finding the meaning of words about "flying kite"
3. Spelling the words about "flying kite" correctly
4. Using the words in sentences for giving guidance

IV. Learning Material

Terlampir (pertemuan ke – 5 dan pertemuan ke – 6)

V. Teaching technique

Direct Instruction

VI. Learning Media

Crossword game (printed media)

VII. Learning Source

Crossword game, “flying kite”

VIII. Learning Scenario

Pertemuan ke-5

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain crossword game to the students.
 Pada langkah ini guru menjelaskan tentang konsep mengisi crossword game dimana terdapat dua petunjuk, yaitu across untuk menyamping dan down untuk ke bawah pada setiap topik bahasan. Topik bahasan untuk pertemuan ke 5 dan ke ini tentang “flying kite” (menerbangkan layang-layang). Guru membagikan lembaran kertas pada siswa untuk mendemonstrasikan tentang kemah dengan menggunakan crossword game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Pada langkah ini, untuk mencari arti (aspect of meaning) guru meminta siswa untuk mengisi kata yang tepat berdasarkan petunjuk “across” menyamping dan “down” ke bawah. Setelah siswa mengisi kata yang tepat, siswa diminta mengecek huruf – huruf yang ditulis pada kotak across dan down (aspect of spelling). Kemudian setelah mengisi semua kata dengan tepat, guru meminta siswa untuk membaca semua kata (aspect of pronouncing).
 - c. Written form for testing in the word
 Pada langkah ini, guru memandu siswa untuk membuat kalimat dengan memberikan contoh pola kalimat dengan menggunakan future tense dari beberapa kata yang diambil dari hasil jawaban sebelumnya pada across atau down sesuai dengan kata yang diberikan oleh guru tentang benda-benda yang ada di rumah (aspect of using word).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-6

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai

- 1) Type of assessment : formative
- 2) Technique of assessment : written test
- 3) Tool of assessment : test instrument of written and oral test
- 4) Score : minimum score : 0
maximum score : 10

Mengetahui

Kepala Sekolah

(Yusuf, S.Pd.I.)

Guru Mata Pelajaran,

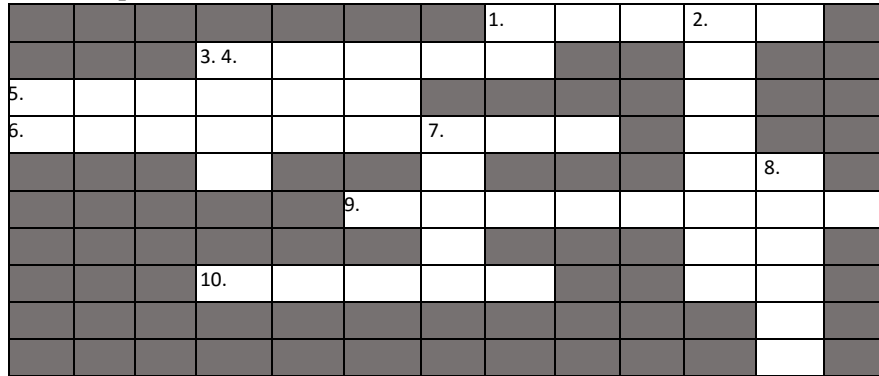
(Septian Sudrajat, S.Pd.)

Lampiran

Pertemuan ke – 5

A. Aspect of meaning

Fill the square based on the clues for across and down which lead to the answers!



Across:		Down	
1.	I connect all the ends of s.....with the string.	2.	I put the c.....on the kite.
3.	I use the k.....to smoothen the bamboo sticks into small size.	4.	I decorate the k.....
5.	I tie the joint with the s.....	7.	I make f.....for the kite.
6.	I shape the b.....on kite.	8.	I cut b.....with the saw.
9.	I prepare the m.....		
10.	I fold the p.....		

B. Aspect of spelling

While filling the square, please spelling each letter based on the correct answer!

1.	s	t	i	c	k					
2.	c	o	v	e	r	i	n	g		
3.	k	n	i	f	e					
4.	k	i	t	e						
5.	s	t	r	i	n	g				
6.	b	u	t	t	e	r	f	l	y	
7.	f	r	a	m	e					
8.	b	a	m	b	o	o				
9.	m	a	t	e	r	i	a	l		
10.	p	a	p	e	r					

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about flying kite!

No.	The words about camping	Pronunciation
1.	stick	UK /stɪk/ US /stɪk/
2.	covering	UK /'kʌv.ər.ɪŋ/ US /'kʌv.ə.ɪŋ/
3.	knife	UK /naɪf/ US /naɪf/
4.	kite	UK /kaɪt/ US /kaɪt/
5.	string	UK /strɪŋ/ US /strɪŋ/
6.	butterfly	UK /'bʌt.ə.flai/ US /'bʌt.ə.flai/
7.	frame	UK /freɪm/ US /freɪm/
8.	bamboo	UK /bæm'bu:/ US /bæm'bu:/
9.	material	UK /mə'tɪə.ri.əl/ US /mə'tɪr.i.əl/
10.	paper	UK /'peɪ.pə/ US /'peɪ.pə/

D. Aspect of using words

Make sentences from these words!

1. stick
2. knife
3. kite
4. frame
5. paper

Pertemuan ke – 6

A. Aspect of meaning and spelling

Fill the square based on the clues and picture for across and down which lead to the answers!

			1.				2.		
3.									
			4.					5.	6.
		7.							
	8.								
	9.								
	10.								

Across:	
3.	k-a-m-e
4.	c-e-n-t-o-n-c
7.	d-o-f-l
8.	p-a-h-e-s
9.	u-p-t
10.	s-e-u
Down:	
1.	c-a-r-e-t-e-d-o
2.	p-a-e-r-p-e-r
5.	u-c-t
6.	t-e-i

B. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about flying kite!

No.	The words about camping	Pronunciation
1.	decorate	UK /'dek.ə.reɪt/ US /'dek.ə.r.ert/
2.	prepare	UK /prɪ'peə/ US /prɪ'per/
3.	make	UK /meɪk/ US /meɪk/
4.	connect	UK /kə'nekt/ US /kə'nekt/
5.	cut	UK /kʌt/ US /kʌt/
6.	tie	UK /taɪ/ US /taɪ/
7.	fold	UK /fəʊld/ US /foʊld/
8.	shape	UK /ʃeɪp/ US /ʃeɪp/
9.	put	UK /pʊt/ US /pʊt/
10.	use	UK /juːz/ US /juːz/

C. Aspect of using words

Make sentences from these words!

1. cut
2. tie
3. put
4. use
5. make

Lesson Plan
Meeting 7 & 8
(Control Class)

School : SDIT Sabilulhuda Cirebon
Subject : English
Language Component : Vocabulary
Class/Semester : V (Five) / I
Theme : cooking
Time Allocation : 4 x 35'

I. Competency Standard

Students are able to ask for and give clarification both in action and language surrounding students' life context, to understand and to express very simple instruction and information in school context.

II. Basic Competency

1. Listening ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
2. Reading ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
3. Pronouncing ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance
4. Writing ask for and give clarification phrase, including giving example to do something in the future plan, and giving guidance

III. Indicator

1. Pronouncing the words about "cooking"
2. Finding the meaning of words about "cooking"
3. Spelling the words about "cooking" correctly
4. Using the words in sentences for giving guidance

IV. Learning Material

Terlampir (pertemuan ke – 7 dan pertemuan ke – 8)

V. Teaching technique

Direct Instruction

VI. Learning Media

Crossword game (printed media)

VII. Learning Source

Crossword game, “cooking”

VIII. Learning Scenario

Pertemuan ke-7

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai
 - e. Guru menyampaikan manfaat pembelajaran (Kompetensi Dasar) yang ingin dicapai
2. Kegiatan Inti (Direct Instruction)
 - a. Explain crossword game to the students.
 Pada langkah ini guru menjelaskan tentang konsep mengisi crossword game dimana terdapat dua petunjuk, yaitu across untuk menyamping dan down untuk ke bawah pada setiap topic bahasan. Topik bahasan untuk pertemuan ke 7 ini tentang “cooking” (memasak). Guru membagikan lembaran kertas pada siswa untuk mendemonstrasikan tentang fasilitas umum dengan menggunakan crossword game.
 - b. Sound, meaning, and repetition for memorizing and testing
 Pada langkah ini, untuk mencari arti (aspect of meaning) guru meminta siswa untuk mengisi kata yang tepat berdasarkan petunjuk “across” menyamping dan “down” ke bawah. Setelah siswa mengisi kata yang tepat, siswa diminta mengecek huruf – huruf yang ditulis pada kotak across dan down (aspect of spelling). Kemudian setelah mengisi semua kata dengan tepat, guru meminta siswa untuk membaca semua kata (aspect of pronouncing).
 - c. Written form for testing in the word
 Pada langkah ini, guru memandu siswa untuk membuat kalimat dengan memberikan contoh pola kalimat dengan menggunakan future tense dari beberapa kata yang diambil dari hasil jawaban sebelumnya pada across atau down sesuai dengan kata yang diberikan oleh guru tentang benda-benda yang ada di rumah (aspect of using word).
3. Kegiatan Penutup
 - a. Guru memberikan rangkuman pelajaran yang telah dipelajari
 - b. Menanyakan kesulitan siswa selama pembelajaran
 - c. Melakukan refleksi dengan menyimpulkan hal – hal yang telah dipelajari
 - d. Merencanakan kegiatan yang akan dipelajari selanjutnya (next meeting), agar peserta didik dapat mempersiapkan diri.

Pertemuan ke-8

1. Kegiatan Pendahuluan
 - a. Salam dan tegur sapa
 - b. Tanya jawab berbagai hal tentang kondisi siswa
 - c. Guru mengecek kehadiran siswa
 - d. Guru menyampaikan tujuan pembelajarn (Kompetensi Dasar) yang ingin dicapai

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about cooking!

No.	The words about birthday	Pronunciation
1.	chop	UK /tʃɒp/ US /tʃɑ:p/
2.	help	UK /help/ US /help/
3.	serve	UK /sɜ:v/ US /sɜ:v/
4.	stir	UK /stɜ:'/ US /stɜ:./
5.	drain	UK /dreɪn/ US /dreɪn/
6.	boil	UK /bɔɪl/ US /bɔɪl/
7.	pour	UK /pɔ:'/ US /pɔ:r/
8.	crack	UK /kræk/ US /kræk/
9.	cook	UK /kʊk/ US /kʊk/
10.	add	UK /æd/ US /æd/

D. Aspect of using words

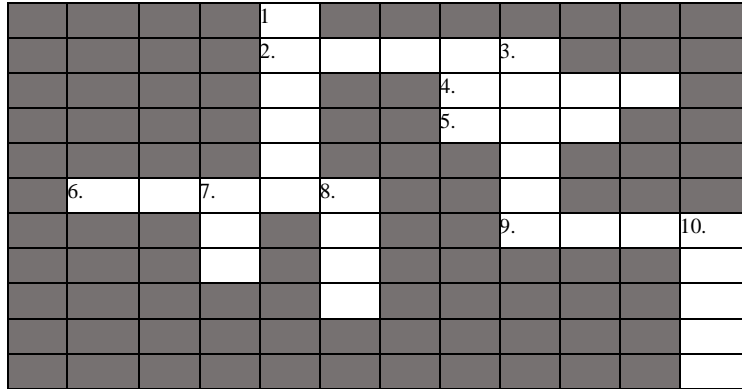
Make sentences from these words!











1. Cook
2. Chop
3. Boil
4. Pour
5. Stir

Pertemuan ke – 8

A. Aspect of meaning

Fill the square based on the clues for across and down which lead to the answers!



Across:		Down	
2.		1.	
4.		3.	
5.		7.	
6.		8.	
9.		10.	

B. Aspect of spelling

While filling the square, please spelling each letter based on the correct answer!

1.	c	o	f	f	e	e
2.	o	n	i	o	n	
3.	n	o	o	d	l	e
4.	s	o	u	p		
5.	m	o	m			
6.	w	a	t	e	r	
7.	t	e	a			
8.	r	i	c	e		
9.	e	g	g	s		
10.	s	u	g	a	r	

C. Aspect of pronunciation

Follow the sound of words from the teacher that you hear about cooking!

No.	The words about birthday	Pronunciation
1.	coffee	UK /'kɒf.i/ US /'kɑ:.fi/
2.	onion	UK /'ʌn.jən/ US /'ʌn.jən/
3.	noodle	UK /'nu:.dʰl/ US /'nu:.dʰl/
4.	soup	UK /su:p/ US /su:p/
5.	mom	UK /mɒm/ US /mɑ:m/
6.	water	UK /'wɔ:.tə/ US /'wɑ:.tə/
7.	tea	UK /ti:/ US /ti:/
8.	rice	UK /raɪs/ US /raɪs/
9.	eggs	UK /egs/ US /egs/
10.	sugar	UK /'ʃʊg.ə/ US /'ʃʊg.ə/

D. Aspect of using words








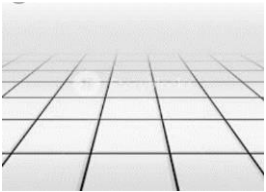
Make sentences from these words!

- Tea
- Rice
- Eggs
- Sugar
- Soup

Appendix 3. The Blueprint of Instrument before Try-Out

No	Indicators	Items	Total
1.	Meaning of words	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18	18
2.	Spelling	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35	17
3.	Pronunciation	36, 37, 38, 39, 40, 41, 42, 43, 44, 45	10
4.	Using words	46, 47, 48, 49, 50	5
Total			50

Vocabulary Test before Try-Out

<p>1. This is a/an.....</p> <ul style="list-style-type: none"> a. onion b. coffee c. noodle d. rice 	<p>2. This is a/an.....</p> <ul style="list-style-type: none"> a. onion b. mother c. soup d. sugar 
<p>3. This is a/an</p> <ul style="list-style-type: none"> a. sugar b. water c. eggs d. tea 	<p>4. This is a.....</p> <ul style="list-style-type: none"> a. noodle b. rice c. soup d. water 
<p>5. This is a.....</p> <ul style="list-style-type: none"> a. tea b. water c. coffee d. soup 	<p>6. Intan: Look at the.....! It is colorful. Putri: yes, it is.</p> <ul style="list-style-type: none"> a. gate b. wall c. fence d. staircase 
<p>7. Ciko: Look at the.....! It is high. May: yes, it does.</p> <ul style="list-style-type: none"> a. Dining room b. Bathroom c. Bedroom d. Chimney 	<p>8. This is a.....</p> <ul style="list-style-type: none"> a. roof b. ceiling c. floor d. door 

9. I.....all the ends of sticks with the string. a. decorate b. connect c. prepare d. shape	10. I use the.....to smoothen the bamboo sticks into small size. a. frame b. paper c. stick d. knife
11. I fold the..... a. paper b. knife c. string d. kite	12. I.....the knife to smoothen the bamboo sticks into small size. a. cut b. fold c. use d. make
13. I tie the joint with the..... a. knife b. paper c. string d. stick	14. I.....the frame for the kite. a. make b. put c. fold d. cut
15. People buy books or magazines here a. bank b. book store c. bus station d. bus stop	16. People buy medicine or drug here a. drugstore b. book store c. library d. school
17. People have food or party here a. restaurant b. gas station c. bakery d. hospital	18. People can buy many cakes here a. inn b. bus station c. library d. bakery
Arrange these letters into a correct word! 19. t-e-k-r-a- m 20. c-f-i-e-f- o 21. r-e-p-a-r-e- p 22. r-u- c -n-i-a-t 23. d-o-l-o- n -e 24. n-o-n-i- o 25. m-o- b -o-b-a 26. a-r-y-k-e- b 27. g-e-r-a- g -a 28. t-e-r-p-a- c 29. r-o-l-o- f 30. m-e-r-a- f 31. p-e- r -a-p 32. k -e-f-i-n 33. g-u- s -a-r	

34. r-o-u-**p**

35. k-a-**m**-e

Read the following words (oral test):

36. bakery

37. curtain

38. noodle

39. string

40. chop

41. cook

42. stick

43. onion

44. decorate

45. drugstore

Make your own sentences by using these words!

46. kite

47. rice

48. make






49. school

50. bedroom

Appendix 4. The Blueprint of Instrument after Try-Out

No	Indicators	Items	Total
1.	Meaning of words	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10
2.	Spelling	11, 12, 13, 14, 15, 16, 17,18	8
3.	Pronunciation	19, 20, 21, 22, 23, 24, 25, 26	8
4.	Using words	27, 28, 29, 30	4
Total			30

Vocabulary Test after Try-Out

<p>1. This is a/an.....</p> <ul style="list-style-type: none"> a. onion b. coffee c. noodle d. rice 	<p>2. This is a/an.....</p> <ul style="list-style-type: none"> a. onion b. mother c. soup d. sugar 
<p>3. This is a.....</p> <ul style="list-style-type: none"> a. noodle b. rice c. soup d. water 	<p>4. This is a.....</p> <ul style="list-style-type: none"> a. roof b. ceiling c. floor d. door 
<p>5. Intan: Look at the.....! It is colorful. Putri: yes, it is.</p> <ul style="list-style-type: none"> a. gate b. wall c. fence d. staircase 	<p>6. I.....all the ends of sticks with the string.</p> <ul style="list-style-type: none"> a. decorate b. connect c. prepare d. shape
<p>7. I.....the knife to smoothen the bamboo sticks into small size.</p> <ul style="list-style-type: none"> a. cut b. fold c. use d. make 	<p>8. I tie the joint with the.....</p> <ul style="list-style-type: none"> a. knife b. paper c. string d. stick
<p>9. People buy books or magazines here</p> <ul style="list-style-type: none"> a. bank b. book store c. bus station d. bus stop 	<p>10. People buy medicine or drug here</p> <ul style="list-style-type: none"> a. drugstore b. book store c. library d. school

Arrange these letters into a correct word!

- 11. t-e-k-r-a-**m**
- 12. t-e-r-p-a-**c**
- 13. r-o-l-o-**f**
- 14. m-e-r-a-**f**
- 15. p-e-r-a-**p**
- 16. **k**-e-f-i-n
- 17. g-u-**s**-a-r
- 18. k-a-**m**-e

Read the following words (oral test):

- 19. bakery
- 20. curtain
- 21. noodle
- 22. string
- 23. chop
- 24. cook
- 25. stick
- 26. onion

Make your own sentences by using these words!

- 27. kite

- 28. rice

- 29. make

- 30. bedroom

Appendix 5. Blueprint of Students' Motivation Questionnaire before Try-Out

Learning Motivation have several Indicators, as follows:

1. Knowing the goal of learning
2. Having expectation
3. Having curiosity of something new
4. Having interest on subject which will be studied
5. Having self-determination and self-control on subject which will be studied

No	Indicators	Item (+)	Item (-)	Total
1.	Knowing the goal of learning	1, 2, 3	4, 5	5
2.	Having expectation	6, 7, 8	9, 10	5
3.	Having curiosity of something new	11, 12, 13	14, 15	5
4.	Having interest on subject which will be studied	16, 17, 18	19, 20	5
5.	Having self-determination and self-control on subject which will be studied	21, 22, 23	24, 25	5
				25

Students' Motivation Questionnaire before Try Out

Instrument of Students' Motivation Questionnaire

- I. Identitas Siswa :
- Nama :
- Kelas/Nomor :

II. Petunjuk Mengerjakan

1. Isilah identitas anda di atas sesuai dengan data sebenarnya.
2. Berilah tanda (X) pada salah satu jawaban yang paling sesuai dengan pendapat Anda.
3. Kerjakan menurut pendapat Anda dan jangan terpengaruh oleh pendapat orang lain.
4. Kemungkinan jawaban adalah:
SS: Sangat Setuju S: Setuju TS: Tidak Setuju STS: Sangat Tidak Setuju
5. Dalam Pengisian angket ini tidak ada jawaban yang benar atau salah.
6. Hasil angket ini tidak mempengaruhi nilai Anda dalam belajar Bahasa Inggris ataupun nilai Mata Pelajaran lain.

No	Pernyataan	STS	TS	S	SS
1.	Saya belajar Bahasa Inggris supaya bisa membuat kalimat dalam Bahasa Inggris. (Knowing the goal of learning (+))				
2.	Saya belajar Bahasa Inggris supaya lancar berkomunikasi dalam Bahasa Inggris. (Knowing the goal of learning (+))				
3.	Saya sadar dengan menambah jam belajar Bahasa Inggris di rumah, maka saya bisa lebih memahami bagaimana menggunakan kata dalam Bahasa Inggris. (Knowing the goal of learning (+))				
4.	Saya tidak bisa menulis kata dalam Bahasa Inggris. (Knowing the goal of learning (-))				
5.	Saya tidak dapat memahami struktur kata dalam Bahasa Inggris. (Knowing the goal of learning (-))				
6.	Saya ingin mendapatkan nilai Bahasa Inggris yang bagus. (Having expectation (+))				
7.	Saya berharap bisa berbahasa Inggris dengan orang Asing karena dapat menambah kemampuan Bahasa Inggris saya. (Having expectation (+))				
8.	Saya berharap bisa memaknai dari percakapan Bahasa Inggris di sekolah dan menerapkan dalam kehidupan sehari-hari. (Having expectation (+))				
9.	Saya tidak dapat menterjemahkan kata dalam Bahasa Inggris. (Having expectation (-))				
10.	Saya tidak dapat menyimak dengan jelas percakapan pendek dalam Bahasa Inggris. (Having expectation (-))				

11.	Saya merasa penasaran dan bersemangat untuk dapat menguasai kosa kata baru dan permainan-permainan baru dalam Pelajaran Bahasa Inggris. (Having curiosity of something new (+))				
12.	Saya ingin tahu bagaimana mencari persamaan kata dalam Bahasa Inggris. (Having curiosity of something new (+))				
13.	Saya selalu penasaran untuk mengikuti Pelajaran Bahasa Inggris karena dapat menambah kemampuan saya dalam mengartikan kata berbahasa Inggris. (Having curiosity of something new (+))				
14.	Saya tidak dapat mengeja sebuah kata dalam Bahasa Inggris. (Having curiosity of something new (-))				
15.	Saya tidak lancar dalam membaca teks dalam Bahasa Inggris. (Having curiosity of something new (-))				
16.	Bahasa Inggris adalah pelajaran favorit saya. (Having interest on subject which will be studied (+))				
17.	Saya tertarik untuk mempelajari terlebih dahulu supaya saya siap untuk pelajaran besok. (Having interest on subject which will be studied (+))				
18.	Saya tertarik untuk mempelajari hal-hal baru dalam Pelajaran Bahasa Inggris karena dapat meningkatkan pengetahuan saya dalam berbahasa Inggris. (Having interest on subject which will be studied (+))				
19.	Saya tidak dapat mengucapkan kata dalam Bahasa Inggris. (Having interest on subject which will be studied (-))				
20.	Saya tidak dapat memahami gabungan kata dalam Bahasa Inggris. (Having interest on subject which will be studied (-))				
21.	Dengan memperhatikan pelajaran Bahasa Inggris di kelas, saya dapat memahami bagaimana berbicara dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied(+))				
22.	Dari penjelasan guru di kelas, saya berusaha untuk dapat merangkai/menyusun sebuah kalimat dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (+))				
23.	Ketika kegiatan belajar di kelas, saya harus duduk paling depan supaya lebih jelas bagaimana guru mengucapkan kata dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (+))				
24.	Saya tidak bisa mengikuti diskusi dengan teman pada saat kerja kelompok di kelas. (Having self-determination and self-control on subject which will be studied (-))				

25.	Saya tidak dapat mengelompokkan kata – kata dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (-))				
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Appendix 6. Blueprint of Students' Motivation Questionnaire after Try-Out

Learning Motivation have several Indicators, as follows:

1. Knowing the goal of learning
2. Having expectation
3. Having curiosity of something new
4. Having interest on subject which will be studied
5. Having self-determination and self-control on subject which will be studied

No	Indicators	Item (+)	Item (-)	Total
1.	Knowing the goal of learning	1, 2	3, 4	4
2.	Having expectation	5, 6	7, 8	4
3.	Having curiosity of something new	9, 10	11, 12	4
4.	Having interest on subject which will be studied	13, 14	15	3
5.	Having self-determination and self-control on subject which will be studied	16, 17, 18	19,20	5
				20

Students' Motivation Questionnaire after Try Out

Instrument of Students' Motivation Questionnaire

- I. Identitas Siswa :
- Nama :
- Kelas/Nomor :
- II. Petunjuk Mengerjakan
1. Isilah identitas anda di atas sesuai dengan data sebenarnya.
 2. Berilah tanda (X) pada salah satu jawaban yang paling sesuai dengan pendapat Anda.
 3. Kerjakan menurut pendapat Anda dan jangan terpengaruh oleh pendapat orang lain.
 4. Kemungkinan jawaban adalah:
SS: Sangat Setuju S: Setuju TS: Tidak Setuju STS: Sangat Tidak Setuju
 5. Dalam Pengisian angket ini tidak ada jawaban yang benar atau salah.
 6. Hasil angket ini tidak mempengaruhi nilai Anda dalam belajar Bahasa Inggris ataupun nilai Mata Pelajaran lain.

No	Pernyataan	STS	TS	S	SS
1.	Saya belajar Bahasa Inggris supaya bisa membuat kalimat dalam Bahasa Inggris. (Knowing the goal of learning (+))				
2.	Saya belajar Bahasa Inggris supaya lancar berkomunikasi dalam Bahasa Inggris. (Knowing the goal of learning (+))				
3.	Saya tidak bisa menulis kata dalam Bahasa Inggris. (Knowing the goal of learning (-))				
4.	Saya tidak dapat memahami struktur kata dalam Bahasa Inggris. (Knowing the goal of learning (-))				
5.	Saya ingin mendapatkan nilai Bahasa Inggris yang bagus. (Having expectation (+))				
6.	Saya berharap bisa berbahasa Inggris dengan orang Asing karena dapat menambah kemampuan Bahasa Inggris saya. (Having expectation (+))				
7.	Saya tidak dapat menterjemahkan kata dalam Bahasa Inggris. (Having expectation (-))				
8.	Saya tidak dapat menyimak dengan jelas percakapan pendek dalam Bahasa Inggris. (Having expectation (-))				
9.	Saya merasa penasaran dan bersemangat untuk dapat menguasai kosa kata baru dan permainan-permainan baru dalam Pelajaran Bahasa Inggris. (Having curiosity of something new (+))				
10.	Saya ingin tahu bagaimana mencari persamaan kata dalam Bahasa Inggris. (Having curiosity of something new (+))				
11.	Saya tidak dapat mengeja sebuah kata dalam Bahasa				

	Inggris. (Having curiosity of something new (-))				
12.	Saya tidak lancar dalam membaca teks dalam Bahasa Inggris. (Having curiosity of something new (-))				
13.	Saya tertarik untuk mempelajari terlebih dahulu supaya saya siap untuk pelajaran besok. (Having interest on subject which will be studied (+))				
14.	Saya tertarik untuk mempelajari hal-hal baru dalam Pelajaran Bahasa Inggris karena dapat meningkatkan pengetahuan saya dalam berbahasa Inggris. (Having interest on subject which will be studied (+))				
15.	Saya tidak dapat mengucapkan kata dalam Bahasa Inggris. (Having interest on subject which will be studied (-))				
16.	Dengan memperhatikan pelajaran Bahasa Inggris di kelas, saya dapat memahami bagaimana berbicara dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied(+))				
17.	Dari penjelasan guru di kelas, saya berusaha untuk dapat merangkai/menyusun sebuah kalimat dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (+))				
18.	Ketika kegiatan belajar di kelas, saya harus duduk paling depan supaya lebih jelas bagaimana guru mengucapkan kata dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (+))				
19.	Saya tidak bisa mengikuti diskusi dengan teman pada saat kerja kelompok di kelas. (Having self-determination and self-control on subject which will be studied (-))				
20.	Saya tidak dapat mengelompokkan kata – kata dalam Bahasa Inggris. (Having self-determination and self-control on subject which will be studied (-))				

Appendix 7. Try-out Data and validity Analysis of Motivation Questionnaire

No	Number of Item												
Resp	1	2	3	4	5	6	7	8	9	10	11	12	13
1	0	2	2	3	1	3	1	2	4	3	3	3	2
2	3	4	1	4	3	4	3	1	4	2	4	4	1
3	4	3	2	1	4	1	1	1	2	4	1	2	4
4	2	1	2	4	1	1	3	0	3	1	2	1	0
5	1	1	4	3	1	3	1	1	1	2	1	1	2
6	3	2	1	4	4	1	4	1	3	1	1	4	4
7	0	1	4	2	4	3	3	0	4	4	4	4	2
8	4	3	1	4	2	4	2	2	0	3	2	2	1
9	3	0	2	1	4	3	3	2	1	4	3	1	4
10	3	4	1	3	2	1	1	1	2	0	0	3	1
11	4	3	3	2	1	0	3	1	1	3	2	0	2
12	2	1	1	0	3	3	0	2	3	2	3	3	4
13	4	1	4	1	0	4	1	1	3	3	4	1	3
14	4	3	1	3	0	1	2	3	4	4	3	1	1
15	4	4	1	4	4	4	4	3	3	4	4	4	2
16	3	4	0	1	4	0	1	0	0	1	1	4	1
17	0	1	1	1	2	1	3	4	1	2	4	2	0
18	4	2	2	2	2	3	4	1	1	4	2	2	1
19	4	4	1	4	4	4	4	4	4	4	4	4	1
20	0	3	2	0	1	1	3	1	4	1	0	1	2
21	1	4	1	3	1	3	4	4	3	1	2	0	1
22	3	0	1	1	2	2	2	3	0	0	1	1	0
23	4	4	2	4	4	4	4	1	4	4	4	4	3
24	4	1	4	1	1	4	3	2	3	1	2	2	1
25	4	4	4	4	4	4	4	3	4	4	4	4	2
26	4	4	0	4	4	4	4	4	4	4	4	1	4
$\sum x_i$	72	64	48	64	63	66	68	48	66	66	65	59	49
$\sum x_i^2$	56.6	50.5	39.4	50.46	52.35	50.46	40.15	41.38	52.46	50.46	46.5	49.12	42.65
$\sum x_i^2$	4096	4489	2809	1681	3025	3364	4096	3600	2601	3025	3249	3136	2704
$\sum x_i x_i$	4608	4096	3072	4096	4032	4224	4352	3072	4224	4224	4160	3776	3136
$\sum x_i x_i^2$	255	226	170	226.5	222.9	233.5	240.6	169.8	233.5	233.5	230	208.8	173.4
r_o	0.44	0.42	0.35	0.417	0.403	0.43	0.497	0.346	0.422	0.43	0.442	0.39	0.348
r_i	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Status	valid	valid	drop	valid	valid	valid	valid	drop	valid	valid	valid	valid	drop

Number of Item												X _t	X _t ²
14	15	16	17	18	19	20	21	22	23	24	25		
4	3	1	3	4	4	2	4	1	4	3	2	64	4096
3	3	2	4	3	0	0	4	1	4	1	4	67	4489
4	2	1	1	2	1	1	2	2	3	2	2	53	2809
4	1	0	2	3	3	0	1	3	1	1	1	41	1681
4	4	1	3	1	4	1	4	1	4	4	2	55	3025
3	3	2	0	3	3	1	3	2	0	4	1	58	3364
4	4	2	4	0	2	0	0	3	4	4	2	64	4096
3	3	4	1	3	1	2	3	0	4	3	3	60	3600
1	0	0	1	1	1	1	4	3	3	1	4	51	2601
3	3	4	2	2	3	0	4	4	1	4	3	55	3025
0	2	4	3	4	4	1	4	3	3	4	0	57	3249
1	1	4	4	4	2	2	1	2	4	0	4	56	3136
4	1	2	1	3	1	0	0	3	3	3	1	52	2704
3	3	3	0	0	1	1	1	4	0	4	2	52	2704
4	4	1	4	4	4	0	4	4	4	4	4	86	7396
0	3	2	3	3	2	4	1	3	4	1	3	49	2401
3	1	2	1	4	3	1	4	3	1	4	4	53	2809
1	2	1	3	4	4	4	3	4	4	3	1	64	4096
4	4	4	4	4	4	2	4	4	3	4	4	91	8281
1	1	2	0	2	4	1	0	3	4	3	3	43	1849
0	3	0	3	3	1	1	1	2	1	4	4	51	2601
1	0	1	4	0	2	4	3	2	1	0	2	36	1296
4	4	1	4	4	3	4	4	3	3	1	0	81	6561
0	2	0	2	3	3	1	3	4	2	2	2	53	2809
4	4	1	4	4	4	2	4	4	4	4	1	89	7921
3	3	4	4	4	4	4	4	4	4	4	4	91	8281
66	64	49	65	72	68	40	70	72	73	72	63	1572	100880
60.5	40.46	48.7	52.5	46.6	42.15	48.5	57.54	32.62	50	50.62	44.3		
2704	7396	2401	2809	4096	8281	1849	2601	1296	6561	2809	7921	8281	100880
4224	4096	3136	4160	4608	4352	2560	4480	4608	4672	4608	4032		
234	226.5	173	230	255	240.6	142	247.7	254.8	258	254.8	223		
0.39	0.466	0.33	0.42	0.49	0.485	0.27	0.427	0.584	0.48	0.469	0.44		
0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38		
valid	valid	drop	valid	valid	valid	drop	valid	valid	valid	valid	valid		

Item number 1 will be calculated as follow:

$$\begin{aligned}\sum x_i^2 &= \sum x_i^2 - \frac{(\sum x_i)^2}{n} \\ &= 256 - \frac{(72)^2}{26} \\ &= 256 - 199.38 \\ &= 56.61\end{aligned}$$

$$\begin{aligned}\sum x_t^2 &= \sum x_t^2 - \frac{(\sum x_t)^2}{n} \\ &= 100880 - \frac{(1572)^2}{26} \\ &= 100880 - 95045.53 \\ &= 5834.46\end{aligned}$$

$$\begin{aligned}\sum x_i x_t &= \sum x_i x_t - \frac{(\sum x_i)(\sum x_t)}{n} \\ &= 4608 - \frac{(72)(1572)}{26} \\ &= 4608 - 4353.23 \\ &= 254.76\end{aligned}$$

$$\begin{aligned}
r_{it} &= \frac{\sum x_i x_t}{\sqrt{(\sum x_i^2)(\sum x_t^2)}} \\
&= \frac{254.76}{\sqrt{(56.61)(5834.46)}} \\
&= \frac{254.76}{\sqrt{330347.12}} \\
&= \frac{254.76}{574.75} \\
&= 0.44328
\end{aligned}$$

Based on the result of calculation above, it can be concluded that r_o (0.443) is higher than r_t (0.361) at the level of significant (α) 5% N for = 26, because r_o (0.443) > r_t (0.361), item number 1 is valid. For the other items, they are calculated using in same way.

[illegible]

Item number 1 will be calculated as follow (valid to valid):

$$\sum x_i^2 = \sum x_i^2 - \frac{(\sum x_i)^2}{n}$$

$$= 256 - \frac{(72)^2}{26}$$

$$= 256 - 199.38$$

$$= 56.61$$

$$\sum x_t^2 = \sum x_t^2 - \frac{(\sum x_t)^2}{n}$$

$$= 73790 - \frac{(1338)^2}{26}$$

$$= 73790 - 68855.53$$

$$= 4934.46$$

$$\sum x_i x_t = \sum x_i x_t - \frac{(\sum x_i)(\sum x_t)}{n}$$

$$= 3960 - \frac{(72)(1338)}{26}$$

$$= 3960 - 3705.23$$

$$= 254.77$$

$$\begin{aligned}
r_{it} &= \frac{\sum x_i x_t}{\sqrt{(\sum x_i^2)(\sum x_t^2)}} \\
&= \frac{254.76}{\sqrt{(56.61)(4934.46)}} \\
&= \frac{254.76}{\sqrt{279339.78}} \\
&= \frac{254.76}{528.52} \\
&= 0.482
\end{aligned}$$

Based on the result of calculation above, it can be concluded that r_o (0.482) is higher than r_t (0.361) at the level of significant (α) 5% N for = 26, because r_o (0.482) > r_t (0.361), item number 1 is valid. For the other items, they are calculated using in same way.

Appendix 8. Reliability of Questionnaire Try-out

No Resp	Number of Item										
	1	2	4	5	6	7	9	10	11	12	14
1	0	2	3	1	3	1	4	3	3	3	4
2	3	4	4	3	4	3	4	2	4	4	3
3	4	3	1	4	1	1	2	4	1	2	4
4	2	1	4	1	1	3	3	1	2	1	4
5	1	1	3	1	3	1	1	2	1	1	4
6	3	2	4	4	1	4	3	1	1	4	3
7	0	1	2	4	3	3	4	4	4	4	4
8	4	3	4	2	4	2	0	3	2	2	3
9	3	0	1	4	3	3	1	4	3	1	1
10	3	4	3	2	1	1	2	0	0	3	3
11	4	3	2	1	0	3	1	3	2	0	0
12	2	1	0	3	3	0	3	2	3	3	1
13	4	1	1	0	4	1	3	3	4	1	4
14	4	3	3	0	1	2	4	4	3	1	3
15	4	4	4	4	4	4	3	4	4	4	4
16	3	4	1	4	0	1	0	1	1	4	0
17	0	1	1	2	1	3	1	2	4	2	3
18	4	2	2	2	3	4	1	4	2	2	1
19	4	4	4	4	4	4	4	4	4	4	4
20	0	3	0	1	1	3	4	1	0	1	1
21	1	4	3	1	3	4	3	1	2	0	0
22	3	0	1	2	2	2	0	0	1	1	1
23	4	4	4	4	4	4	4	4	4	4	4
24	4	1	1	1	4	3	3	1	2	2	0
25	4	4	4	4	4	4	4	4	4	4	4
26	4	4	4	4	4	4	4	4	4	1	3
$\sum X_i$	72	64	64	63	66	68	66	66	65	59	66
$\sum X_i^2$	56.62	50.462	50.462	52.35	50.462	40.154	52.462	50.462	46.5	49.115	60.462
r_o	0.482	0.4538	0.4538	0.439	0.468	0.5406	0.459	0.468	0.48	0.4241	0.4276
r_t	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Status	valid	valid	valid	valid	valid	valid	valid	valid	valid	valid	valid
S_i^2	2.178	1.9408	1.9408	2.013	1.9408	1.5444	2.0178	1.9408	1.788	1.8891	2.3254

Number of Item									X _i	X _i ²
15	17	18	19	21	22	23	24	25		
3	3	4	4	4	1	4	3	2	55	3025
3	4	3	0	4	1	4	1	4	62	3844
2	1	2	1	2	2	3	2	2	44	1936
1	2	3	3	1	3	1	1	1	39	1521
4	3	1	4	4	1	4	4	2	46	2116
3	0	3	3	3	2	0	4	1	49	2401
4	4	0	2	0	3	4	4	2	56	3136
3	1	3	1	3	0	4	3	3	50	2500
0	1	1	1	4	3	3	1	4	42	1764
3	2	2	3	4	4	1	4	3	48	2304
2	3	4	4	4	3	3	4	0	46	2116
1	4	4	2	1	2	4	0	4	43	1849
1	1	3	1	0	3	3	3	1	42	1764
3	0	0	1	1	4	0	4	2	43	1849
4	4	4	4	4	4	4	4	4	79	6241
3	3	3	2	1	3	4	1	3	42	1764
1	1	4	3	4	3	1	4	4	45	2025
2	3	4	4	3	4	4	3	1	55	3025
4	4	4	4	4	4	3	4	4	79	6241
1	0	2	4	0	3	4	3	3	35	1225
3	3	3	1	1	2	1	4	4	44	1936
0	4	0	2	3	2	1	0	2	27	729
4	4	4	3	4	3	3	1	0	70	4900
2	2	3	3	3	4	2	2	2	45	2025
4	4	4	4	4	4	4	4	1	77	5929
3	4	4	4	4	4	4	4	4	75	5625
64	65	72	68	70	72	73	72	63	1338	73790
40.462	52.5	46.62	42.154	57.538	32.615	50.038	50.615	44.346	4934.4615	
0.5068	0.4519	0.531	0.5276	0.4649	0.6351	0.5198	0.5098	0.4765	S _t ²	189.78698
0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	r _{kk}	0.8443468
valid	valid	valid	valid	valid	valid	valid	valid	valid	S _i ²	37.553254
1.5562	2.0192	1.793	1.6213	2.213	1.2544	1.9246	1.9467	1.7056		

Test of Reliability for Motivation Questionnaire

$$\begin{aligned}\sum S_i^2 &= \frac{\sum x_i^2}{n} \\ &= \frac{56.61}{26} \\ &= 2.17\end{aligned}$$

$(\sum S_i^2)$ of 20 items = 37.553

$$\begin{aligned}\sum S_t^2 &= \frac{\sum x_t^2}{n} \\ &= \frac{4934.46}{26} \\ &= 189.787\end{aligned}$$

$$\begin{aligned}r_{kk} &= \frac{k}{k-1} \left(1 - \frac{\sum S_i^2}{\sum S_t^2} \right) \\ &= \frac{20}{20-1} \left(1 - \frac{37.553}{189.787} \right) \\ &= 1.052 (1 - 0.197) \\ &= 1.052 \times 0.803 \\ &= 0.844\end{aligned}$$

Based on the result of calculation above, it can be concluded that r_{kk} (0.844) is higher than r_t (0.361) at the level of significant (α) 5% N for = 26, because (0.844) > (0.361), the questionnaire is reliable.

Appendix 9. Try-out Data and Validity Analysis of Vocabulary Test

No	Number of Item											
Resp	1	2	3	4	5	6	7	8	9	10	11	12
1	0	1	0	0	1	0	1	0	1	1	0	0
2	1	1	1	1	1	1	1	1	1	1	1	1
3	1	0	1	1	0	0	1	1	0	1	0	1
4	1	1	1	1	1	0	1	1	1	0	1	1
5	0	1	1	0	0	0	1	0	0	0	1	0
6	0	0	1	1	0	1	0	1	1	1	1	1
7	1	1	1	1	1	1	1	1	0	1	1	0
8	0	1	1	1	0	1	1	1	1	0	0	1
9	1	1	1	1	0	0	0	1	0	1	1	1
10	0	1	0	1	1	0	1	0	1	0	0	1
11	1	0	1	1	0	1	1	0	1	1	1	0
12	0	1	1	1	1	0	1	1	1	0	1	1
13	1	1	1	1	0	1	0	0	1	1	1	1
14	0	1	1	1	1	1	1	1	1	0	1	0
15	1	0	1	1	0	1	0	0	1	0	1	1
16	1	1	1	1	0	1	1	1	1	1	1	1
17	1	0	1	1	1	1	0	0	0	0	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1
19	0	1	1	1	0	1	1	0	1	0	0	1
20	1	1	1	1	1	1	1	1	1	1	1	0
21	1	1	1	1	0	1	1	1	1	1	1	1
22	1	1	1	1	1	0	1	1	1	0	1	1
23	1	0	1	1	0	1	1	1	1	0	0	0
24	1	1	1	1	0	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1	1	0
26	1	0	1	1	1	1	1	1	1	0	1	0
$\sum x$	18	19	24	24	13	18	21	18	21	14	20	17
$n/\sum x$	8	7	2	2	13	8	5	8	5	12	6	9
p	0.6923	0.7308	0.9231	0.9231	0.5	0.6923	0.8077	0.6923	0.8077	0.5385	0.7692	0.65385
q	0.3077	0.2692	0.0769	0.0769	0.5	0.3077	0.1923	0.3077	0.1923	0.4615	0.2308	0.34615
μ	38.833	36.684	37.125	37.75	37.923	39.444	36.429	38.5	38	37.786	38.05	37.4706
r_o	0.508	0.1104	0.4252	0.6989	0.2236	0.6239	0.0712	0.4448	0.4782	0.2228	0.4376	0.22874
r_t	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Status	valid	invalid	valid	valid	invalid	valid	invalid	valid	valid	invalid	valid	invalid

Number of Item											
25	26	27	28	29	30	31	32	33	34	35	36
0	1	1	0	0	0	1	1	1	1	1	0
1	1	1	1	0	1	1	1	1	1	0	1
0	0	1	0	1	1	0	1	0	0	1	0
1	1	0	0	1	0	1	0	1	0	0	0
0	0	0	0	0	0	1	1	0	0	1	0
1	0	0	0	1	1	1	0	0	1	0	1
0	0	1	1	0	1	1	1	1	1	1	1
1	1	1	1	1	1	0	1	1	1	0	0
0	0	0	0	0	1	1	0	0	1	0	1
0	0	1	1	1	1	0	0	1	0	1	1
1	1	0	1	1	0	0	0	0	1	1	1
0	1	1	1	1	1	1	1	1	0	0	1
1	0	1	0	1	1	1	1	1	1	1	1
0	0	1	1	1	1	1	1	0	1	0	1
1	1	1	0	1	1	1	1	1	1	1	0
0	0	1	1	1	1	1	1	0	1	1	1
1	1	1	0	1	0	1	1	1	1	1	1
0	1	1	1	1	1	1	1	1	1	1	1
1	1	1	0	1	1	1	0	1	0	1	0
1	1	1	1	1	1	1	1	1	1	1	1
0	1	1	1	1	1	1	1	1	1	1	1
1	1	1	0	1	1	1	0	1	0	1	0
1	1	1	1	1	1	1	1	1	1	1	1
1	0	1	0	1	1	1	1	1	1	1	1
1	1	0	1	1	0	1	1	1	1	1	0
1	0	1	1	1	1	1	1	1	0	0	1
0	1	1	1	1	0	0	1	1	1	0	1
1	1	1	1	1	1	1	1	1	0	1	1
15	15	20	15	21	18	19	21	18	19	15	18
11	11	6	11	5	8	7	5	8	7	11	8
0.57692	0.5769	0.7692	0.5769	0.8077	0.6923	0.7308	0.8077	0.6923	0.7308	0.5769	0.6923
0.42308	0.4231	0.2308	0.4231	0.1923	0.3077	0.2692	0.1923	0.3077	0.2692	0.4231	0.3077
38.9333	37.933	38.15	39.8	37.762	37.944	36.579	37.238	38.778	37.526	35.267	39.111
0.41026	0.2627	0.4607	0.5382	0.4166	0.3395	0.0885	0.2809	0.4975	0.2858	-0.131	0.5607
0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
valid	invalid	valid	valid	valid	invalid	invalid	invalid	valid	invalid	invalid	valid
0.24408	0.2441	0.1775	0.2441	0.1553	0.213	0.1967	0.1553	0.213	0.1967	0.2441	0.213
1.36364	1.3636	3.3333	1.3636	4.2	2.25	2.7143	4.2	2.25	2.7143	1.3636	2.25

Number of Item				X_t	x_t	x_t^2	X_t^2
47	48	49	50				
0	0	0	0	19	-17.1538	294.25	361
1	1	1	1	47	10.84615	117.64	2209
0	1	1	1	26	-10.1538	103.1	676
1	1	0	0	33	-3.15385	9.9467	1089
0	0	0	1	15	-21.1538	447.49	225
1	1	1	0	34	-2.15385	4.6391	1156
1	1	1	1	40	3.846154	14.793	1600
0	0	1	0	37	0.846154	0.716	1369
0	1	0	0	26	-10.1538	103.1	676
0	1	1	1	30	-6.15385	37.87	900
1	1	1	0	35	-1.15385	1.3314	1225
1	0	1	1	39	2.846154	8.1006	1521
1	1	1	1	41	4.846154	23.485	1681
1	0	1	0	34	-2.15385	4.6391	1156
1	1	1	1	39	2.846154	8.1006	1521
1	1	1	1	39	2.846154	8.1006	1521
1	0	1	0	35	-1.15385	1.3314	1225
1	1	1	1	48	11.84615	140.33	2304
1	0	1	1	33	-3.15385	9.9467	1089
1	1	1	1	46	9.846154	96.947	2116
1	1	1	1	44	7.846154	61.562	1936
1	1	1	1	42	5.846154	34.178	1764
1	1	1	0	34	-2.15385	4.6391	1156
1	1	1	1	44	7.846154	61.562	1936
1	1	1	0	40	3.846154	14.793	1600
1	1	1	0	40	3.846154	14.793	1600
20	19	22	15	940	1.42E-14	1627.4	35612
6	7	4	11	36.153846	36.15385	7.9115	33984.6
0.7692	0.7308	0.8462	0.57692			62.592	1627.38
0.2308	0.2692	0.1538	0.42308			St	7.91149
39.35	38.316	38.5	38.2			St²	62.5917
0.7376	0.4502	0.6955	0.30202				
0.38	0.38	0.38	0.38				
valid	valid	valid	invalid				
0.1775	0.1967	0.1302	0.24408	9.3846154			
3.3333	2.7143	5.5	1.36364	193.40606	3	676	

No Resp	Number of Item									
1-26	1	2	3	4	5	6	7	8	9	10
$\sum x$	18	19	24	24	13	18	21	18	21	14
$n/\sum x$	8	7	2	2	13	8	5	8	5	12
p	0.6923	0.7308	0.9231	0.9231	0.5	0.6923	0.8077	0.6923	0.8077	0.5385
q	0.3077	0.2692	0.0769	0.0769	0.5	0.3077	0.1923	0.3077	0.1923	0.4615
μ	38.833	36.684	37.125	37.75	37.923	39.444	36.429	38.5	38	37.786
r_o	0.508	0.1104	0.4252	0.6989	0.2236	0.6239	0.0712	0.4448	0.4782	0.2228
r_t	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Status	valid	invalid	valid	valid	invalid	valid	invalid	valid	valid	invalid
pq	0.213	0.1967	0.071	0.071	0.25	0.213	0.1553	0.213	0.1553	0.2485
p/q	2.25	2.7143	12	12	1	2.25	4.2	2.25	4.2	1.1667
r_{kk}	0.8794									

Example item number 1

$$\sum x_t = 940$$

$$\begin{aligned}\sum x_t^2 &= \sum x^2 - \frac{(\sum x)^2}{n} \\ &= 35612 - \frac{(940)^2}{26} \\ &= 35612 - 33.98 \\ &= 1627.38\end{aligned}$$

$$\begin{aligned}S_t &= \sqrt{\frac{\sum x_t^2}{n}} \\ &= \sqrt{\frac{1627.38}{26}} \\ &= \sqrt{62.59} \\ &= 7.911\end{aligned}$$

$$\begin{aligned}x_t &= \frac{\sum x_t}{n} \\ &= \frac{940}{26} \\ &= 36.15\end{aligned}$$

$$x_i = 38.83$$

$$\begin{aligned}
 r_1 &= \frac{x_i - x_t}{S_t} \sqrt{\frac{p_1}{q_1}} \\
 &= \frac{38.83 - 36.15}{7.911} \sqrt{\frac{0.69}{0.30}} \\
 &= 0.33 \times 1.51 \\
 &= 0.508
 \end{aligned}$$

Based on the calculation above, it can be seen that r_o (0.508) is higher than r_t (0.361) at the level of significant (α) 5% N for = 26, because r_o (0.508) > r_t (0.361), item number 1 is valid. For the other items, they are calculated using in same way.

x_t	x_t^2	X_t^2
-18.5	342.25	16
5.5	30.25	784
-10.5	110.25	144
-0.5	0.25	484
-16.5	272.25	36
-0.5	0.25	484
1.5	2.25	576
0.5	0.25	529
-7.5	56.25	225
-3.5	12.25	361
0.5	0.25	529
0.5	0.25	529
2.5	6.25	625
-1.5	2.25	441
1.5	2.25	576
2.5	6.25	625
1.5	2.25	576
6.5	42.25	841
-1.5	2.25	441
6.5	42.25	841
7.5	56.25	900
2.5	6.25	625
1.5	2.25	576
6.5	42.25	841
6.5	42.25	841
6.5	42.25	841
0	1124.5	14287
585	6.5764732	13162.5
	43.25	1124.5
	s_t	6.5764732
	s_t^2	43.25
	\sum_{pq}	2.096
	r_{kk}	0.9843

Appendix 10. Reliability Analysis of Vocabulary Test

Known:

$$\sum_{pq} = 2.096$$

$$n = 30$$

$$s_t^2 = 43.25$$

$$k = 30$$

$$\begin{aligned} r_{kk} &= \frac{k}{k-1} \left(1 - \frac{\sum_{pq}}{st^2} \right) \\ &= \frac{30}{30-1} \left(1 - \frac{2.096}{43.25} \right) \\ &= 1.034 (0.952) \\ &= 0.984 \end{aligned}$$

The coefficient of reliability is 0.984, or higher than $r_t(0.361)$, so the instrument is reliable.

Appendix 12. The Result of Motivation Questionnaire of Control Class

No Resp	Number of Item																				total 1
	1	2	4	5	6	7	9	10	11	12	14	15	17	18	19	21	22	23	24	25	
1	3	2	3	4	3	2	4	2	2	4	2	3	3	2	2	2	2	4	2	2	53
2	3	2	2	2	4	3	2	2	3	2	3	3	2	2	2	3	2	2	3	2	49
3	4	3	4	4	4	2	4	4	3	4	3	2	4	2	2	2	4	2	2	2	61
4	2	2	2	2	2	3	2	2	2	2	2	3	2	3	3	2	3	2	3	4	48
5	3	3	2	4	3	0	2	2	3	3	1	4	3	2	2	2	3	2	2	3	49
6	3	2	2	2	3	2	3	2	2	4	3	2	4	3	3	2	3	2	4	3	54
7	4	3	1	4	1	3	1	3	2	3	2	2	2	2	2	2	3	1	2	3	46
8	3	4	4	0	4	2	4	3	2	2	4	4	1	3	4	3	4	4	3	4	62
9	3	0	1	4	3	3	4	4	3	4	4	0	1	4	4	4	3	3	4	4	60
10	2	1	3	2	3	2	2	3	4	3	2	3	2	2	3	2	2	4	2	2	49
11	4	3	2	3	0	3	4	3	4	0	3	4	3	4	4	4	3	4	4	3	62
12	2	3	2	3	3	2	3	2	3	3	4	2	4	2	2	1	2	4	2	2	51
13	2	3	3	1	2	3	3	2	2	3	4	2	3	3	2	3	3	2	2	2	50
14	4	2	3	4	4	2	4	2	3	1	3	3	4	4	1	4	4	4	2	4	62
15	4	3	4	3	2	3	4	2	3	4	2	3	2	4	3	3	4	3	4	4	64
16	4	2	3	4	4	1	3	4	4	2	4	3	4	2	4	3	4	4	4	4	67
17	2	4	4	2	4	3	4	4	4	4	3	3	3	2	3	4	3	2	4	2	64
18	2	2	2	0	4	2	2	4	2	1	2	2	3	4	4	2	1	2	3	4	48
19	4	3	4	2	4	2	4	2	4	2	4	4	2	4	2	4	4	3	4	3	65
20	2	4	1	4	3	4	4	4	4	4	4	4	0	2	4	4	3	4	4	3	66
21	4	4	3	4	4	2	3	4	4	2	3	2	3	4	2	2	4	3	4	4	65
22	2	1	2	3	3	2	3	3	2	3	3	1	0	4	3	3	2	3	2	2	47
23	4	4	2	4	4	4	3	4	2	3	2	4	2	4	3	4	4	4	4	4	69
24	3	2	4	2	4	3	4	4	4	4	2	4	4	3	3	3	4	2	3	3	65
25	4	3	2	2	2	3	4	2	3	0	2	2	3	2	3	3	2	4	2	1	49
26	3	2	2	4	3	2	1	2	3	3	2	3	2	4	3	3	2	2	3	3	52

Number of Item												Total	Score
19	20	21	22	23	24	25	26	27	28	29	30		
1	1	0	0	1	1	1	1	1	1	1	1	26	8.66667
1	1	0	1	1	1	1	1	0	1	1	1	27	9
1	1	0	0	1	1	1	1	1	1	1	1	26	8.66667
1	1	0	1	1	1	1	1	1	1	1	1	28	9.33333
1	1	0	0	1	1	1	1	1	1	1	1	27	9
1	1	0	0	1	1	1	1	0	1	1	1	23	7.66667
1	1	0	0	1	1	1	1	1	0	1	1	23	7.66667
1	1	0	0	1	1	1	1	0	1	1	1	23	7.66667
1	1	0	0	1	1	1	1	0	1	1	1	21	7
1	1	0	0	1	1	1	1	1	0	1	1	27	9
1	0	0	1	1	1	1	1	0	1	1	1	22	7.33333
1	1	0	0	1	1	1	1	1	1	1	1	25	8.33333
1	1	0	1	1	1	1	1	1	1	1	1	28	9.33333
1	1	0	0	1	1	1	1	0	1	1	0	22	7.33333
1	1	0	0	1	1	1	1	1	1	1	1	25	8.33333
1	1	0	0	1	1	1	1	0	0	1	1	23	7.66667
1	1	0	0	1	1	1	1	0	0	1	1	21	7
1	1	0	1	1	1	1	1	0	0	1	1	24	8
1	0	0	1	1	1	1	1	0	1	1	1	23	7.66667
1	1	0	0	1	1	1	1	0	1	1	1	25	8.33333
1	1	0	0	1	1	1	1	1	0	1	1	25	8.33333
1	1	1	1	1	1	1	1	0	1	1	1	28	9.33333
1	1	0	0	1	1	1	1	0	0	1	1	24	8
1	1	1	1	1	1	1	1	0	0	1	1	25	8.33333
1	1	1	1	1	1	1	1	1	1	1	1	28	9.33333
1	1	1	1	1	1	1	1	0	1	1	1	25	8.33333

Appendix 15. The Tabulation of Motivation Questionnaire and Vocabulary Test
Scores

Vocabra game				Crossword game		
No	Motivation	Vocabulary Test		No	Motivation	Vocabulary Test
1	74	10		1	69	8
2	73	9.6		2	67	7.6
3	72	9.6		3	66	8.3
4	72	10		4	65	7.6
5	72	10		5	65	8.3
6	71	9		6	65	8.3
7	71	9		7	64	8.3
8	70	9		8	64	7
9	70	10		9	62	7.6
10	69	10		10	62	7.3
11	69	9.3		11	62	7.3
12	69	10		12	61	8.6
13	64	10		13	60	7
14	58	7.6		14	54	7.6
15	56	7.6		15	53	8.6
16	56	8		16	52	8.3
17	56	8.3		17	50	9
18	53	8.6		18	51	8.3
19	50	7		19	49	9
20	49	7.6		20	49	9
21	49	8.6		21	49	9
22	48	7		22	49	9.3
23	46	7.3		23	48	9.3
24	46	7.3		24	48	8
25	46	7.6		25	47	9.3
26	45	9		26	46	7.6

The Data of High and Low Motivation in Vocabulary

Media/Motivation	Teaching Media	
	Vocabra game (A ₁)	Crossword game (A ₂)
High Motivation (B ₁)	10	8.6
	10	8.3
	10	8.3
	10	8.3
	10	8.3
	10	8
	10	7.6
	9.6	7.6
	9.6	7.6
	9.3	7.3
	9	7.3
	9	7
	9	7
Low Motivation (B ₂)	9	9.3
	8.6	9.3
	8.6	9.3
	8.3	9
	8	9
	7.6	9
	7.6	9
	7.6	8.6
	7.6	8.3
	7.3	8.3
	7.3	8
	7	7.6
	7	7.6

Appendix 16. Mean, Mode, Median, and Standard Deviation.1. Data Class of Vocabra game (A_1)

7 7 7.3 7.3 7.6 7.6 7.6 7.6 8 8.3 8.6 8.6 9
 9 9 9 9.3 9.6 9.6 10 10 10 10 10 10 10

1. The highest score is 10
2. The lowest score is 7
3. Range is $10 - 7 = 3$
4. The number of classes is $1 + (3.3) \log 26 = 5.66$ (6 is used)
5. The class width (interval) $= \frac{3}{6} = 0.5$ (0.5 is used)

Class Limit	Class Boundaries	Mid point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	15.38
7.5 - 7.9	7.45 - 7.95	7.7	4	30.8	948.64	15.38
8 - 8.4	7.95 - 8.45	8.2	2	16.4	268.96	7.692
8.5 - 8.9	8.45 - 8.95	8.7	2	17.4	302.76	7.692
9 - 9.4	8.95 - 9.45	9.2	5	46	2116	19.23
9.5 - 10	9.45 - 10.05	9.75	9	87.8	7700.063	34.62
			26	227	12165.86	100

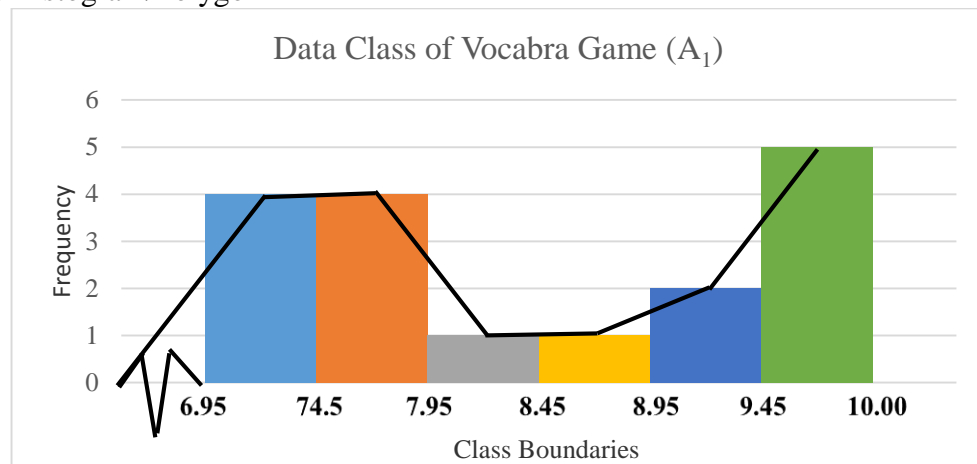
$$6. \text{ Mean } \bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{227}{26} = 8.73$$

$$7. \text{ Mo} = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 9.45 + 0.5 \left\{ \frac{4}{4 + 9} \right\} = 9.60$$

$$8. \text{ Me} = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 8.45 + 0.5 \left\{ \frac{\frac{26}{2} - 10}{2} \right\} = 9.20$$

$$9. S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n - 1} = \frac{\sqrt{12165.86 - \frac{(227)^2}{26}}}{26 - 1} = \frac{\sqrt{12165.86 - 1981.88}}{25} = 20.18$$

10. Histogram/Polygon

2. Data Class of Crossword game (A_2)

7 7 7.3 7.3 7.6 7.6 7.6 7.6 7.6 8 8 8.3 8.3
 8.3 8.3 8.3 8.3 8.6 8.6 9 9 9 9 9.3 9.3 9.3

1. The highest score is 9.3
2. The lowest score is 7
3. Range is $9.3 - 7 = 2.3$
4. The number of classes is $1 + (3.3) \log 26 = 5.66$ (6 is used)
5. The class width (interval) = $\frac{2.3}{6} = 0.38$ (0.4 is used)

Class Limit	Class Boundaries	Mid point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.3	6.95 - 7.35	7.15	4	28.6	817.96	15.38
7.4 - 7.7	7.35 - 7.75	7.55	5	37.8	1425.063	19.23
7.8 - 8.1	7.75 - 8.15	7.95	2	15.9	252.81	7.692
8.2 - 8.5	8.15 - 8.55	8.35	6	50.1	2510.01	23.08
8.6 - 8.9	8.55 - 8.95	8.75	2	17.5	306.25	7.692
9 - 9.3	8.95 - 9.35	9.15	7	64.1	4102.403	26.92
			26	214	9414.495	100

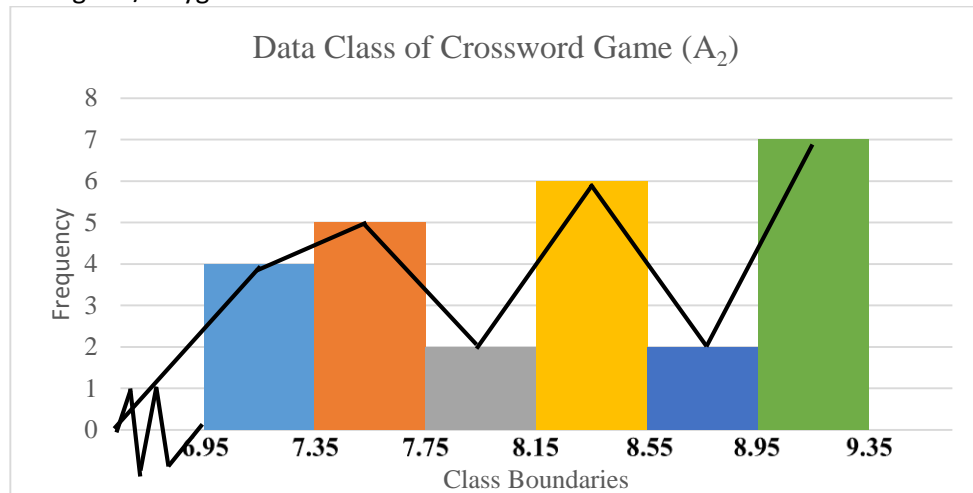
6. Mean $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{214}{26} = 8.23$

7. Mo = $L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 8.95 + 0.4 \left\{ \frac{5}{5+7} \right\} = 9.11$

$$8. \text{Me} = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 8.15 + 0.4 \left\{ \frac{\frac{26}{2} - 11}{6} \right\} = 8.28$$

$$9. S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n-1} = \sqrt{\frac{9414.49 - \frac{(213)^2}{26}}{26-1}} = \sqrt{\frac{9414.49 - 1761.38}{25}} = 17.49$$

10. Histogram/Polygon



Data Class of (B₁)

7 7 7.3 7.3 7.6 7.6 7.6 8 8.3 8.3 8.3 8.3 8.3 8.6
9 9 9 9.3 9.6 9.6 10 10 10 10 10 10 10

1. The highest score is 10
2. The lowest score is 7
3. Range is $10 - 7 = 3$
4. The number of classes is $1 + (3.3) \log 26 = 5.66$ (6 is used)
5. The class width (interval) $= \frac{3}{6} = 0.5$ (0.5 is used)

Class Limit	Class Boundaries	Mid point (X _i)	Freq (F _i)	F _i X _i	(F _i X _i) ²	percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	15.38
7.5 - 7.9	7.45 - 7.95	7.7	3	23.1	533.61	11.54
8 - 8.4	7.95 - 8.45	8.2	5	41	1681	19.23
8.5 - 8.9	8.45 - 8.95	8.7	1	8.7	75.69	3.846
9 - 9.4	8.95 - 9.45	9.2	4	36.8	1354.24	15.38
9.5 - 10	9.45 - 10.05	9.75	9	87.8	7700.063	34.62
			26	226	12174.04	100

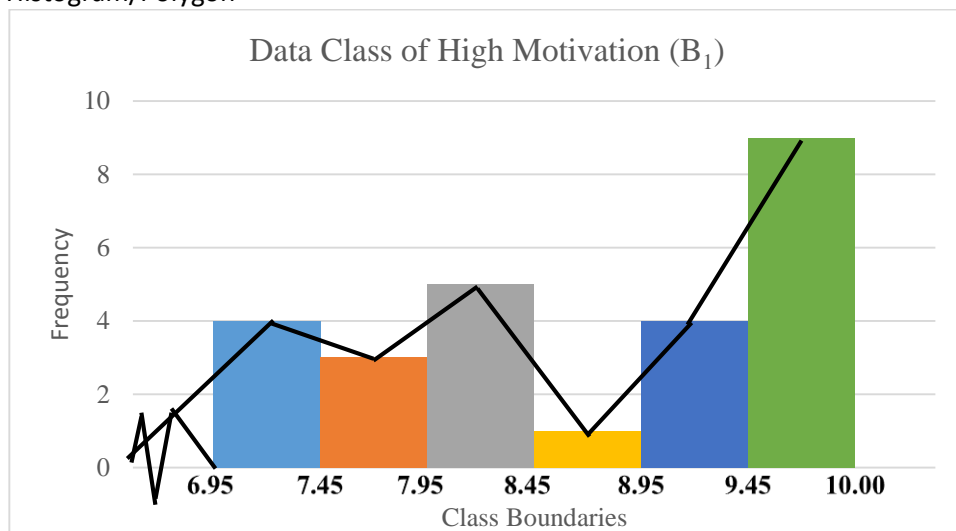
$$6. \text{ Mean } \bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{226}{26} = 8.69$$

$$7. \text{ Mo} = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 9.45 + 0.5 \left\{ \frac{5}{5+9} \right\} = 9.62$$

$$8. \text{ Me} = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 7.95 + 0.5 \left\{ \frac{\frac{26}{2} - 7}{5} \right\} = 8.55$$

$$9. S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n-1} = \sqrt{\frac{12174.04 - \frac{(226)^2}{26}}{26-1}} = \sqrt{\frac{12174.04 - 1964.46}{25}} = 20.20$$

10. Histogram/Polygon



Data Class of (B_2)

7 7 7.3 7.3 7.6 7.6 7.6 7.6 7.6 7.6 8 8 8.3
 8.3 8.3 8.6 8.6 8.6 9 9 9 9 9 9.3 9.3 9.3

1. The highest score is 9.3
2. The lowest score is 7
3. Range is $9.3 - 7 = 2.3$
4. The number of classes is $1 + (3.3) \log 26 = 5.66$ (6 is used)
5. The class width (interval) $= \frac{2.3}{6} = 0.38$ (0.4 is used)

Class Limit	Class Boundaries	Mid point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
7 - 7.3	6.95 - 7.35	7.15	4	28.6	817.96	15.38
7.4 - 7.7	7.35 - 7.75	7.55	6	45.3	2052.09	23.08
7.8 - 8.1	7.75 - 8.15	7.95	2	15.9	252.81	7.692
8.2 - 8.5	8.15 - 8.55	8.35	3	25.1	627.5025	11.54
8.6 - 8.9	8.55 - 8.95	8.75	3	26.3	689.0625	11.54
9 - 9.3	8.95 - 9.35	9.15	8	73.2	5358.24	30.77
			26	214	9797.665	100

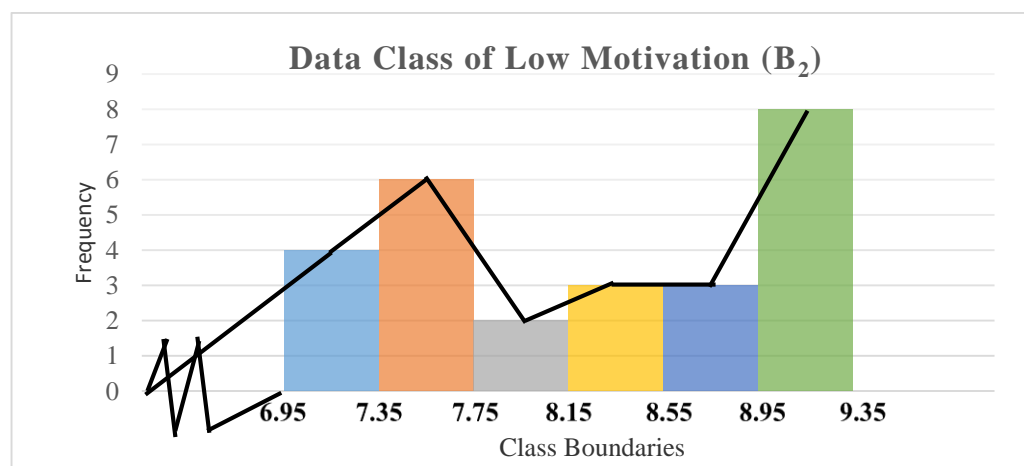
6. Mean $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{214}{26} = 8.23$

7. $M_o = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 8.95 + 0.4 \left\{ \frac{5}{5+8} \right\} = 9.1$

8. $M_e = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 8.15 + 0.4 \left\{ \frac{\frac{26}{2} - 12}{3} \right\} = 8.28$

9. $S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n - 1} = \sqrt{\frac{9797.66 - \frac{(214)^2}{26}}{26 - 1}} = \sqrt{\frac{9797.66 - 1761.38}{25}} = 17.92$

10. Histogram/Polygon



3. Data Class of Vocabra game (A_1B_1)

9 9 9 9.3 9.6 9.6 10 10 10 10 10 10 10

1. The highest score is 10
2. The lowest score is 9
3. Range is $10 - 9 = 1$
4. The number of classes is $1 + (3.3) \log 13 = 4.67$ (4 is used)
5. The class width (interval) $= \frac{1}{4} = 0.25$ (0.3 is used)

Class Limit	Class Boundaries	Mid point (X_i)	Freq (F_i)	$F_i X_i$	$(F_i X_i)^2$	Percentage
9 - 9.2	8.95 - 9.25	9.1	1	9.1	82.81	7.692
9.3 - 9.5	9.25 - 9.55	9.4	4	37.6	1413.76	30.77
9.6 - 9.8	9.55 - 9.85	9.7	2	19.4	376.36	15.38
9.9 - 10	9.85 - 10.05	9.95	6	59.7	3564.09	46.15
			13	126	5437.02	100

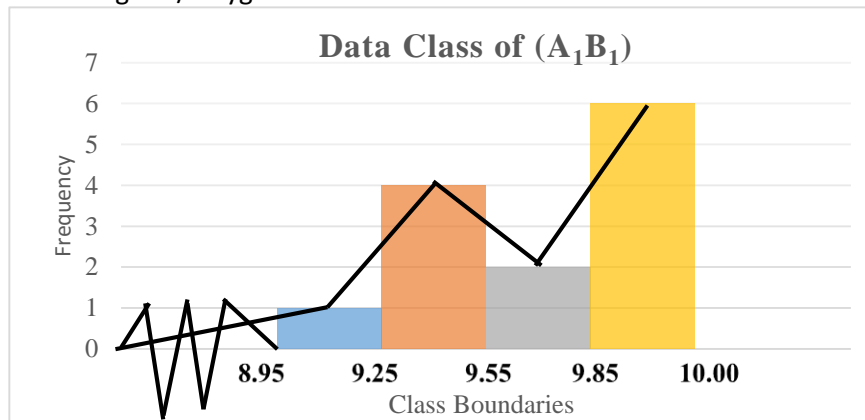
6. Mean $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{126}{13} = 9.69$

7. $M_o = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 9.85 + 0.3 \left\{ \frac{4}{4+6} \right\} = 9.97$

8. $M_e = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 9.55 + 0.3 \left\{ \frac{\frac{13}{2} - 5}{2} \right\} = 9.77$

9. $S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n - 1} = \frac{\sqrt{5437.02 - \frac{(126)^2}{13}}}{13 - 1} = \frac{\sqrt{5437.02 - 1221.23}}{12} = 18.74$

10. Histogram/Polygon

4. Data Class of Vocabra game (A₂B₁)

7 7 7.3 7.3 7.6 7.6 7.6 8 8.3 8.3 8.3 8.3 8.6

1. The highest score is 8.6
2. The lowest score is 7
3. Range is $8.6 - 7 = 1.6$
4. The number of classes is $1 + (3.3) \log 13 = 4.67$ (4 is used)
5. The class width (interval) $= \frac{1.6}{4} = 0.4$ (0.5 is used)

Class Limit	Class Boundaries	Mid Point (X _i)	Freq (F _i)	F _i X _i	(F _i X _i) ²	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	30.77
7.5 - 7.9	7.45 - 7.95	7.7	3	23.1	533.61	23.08
8 - 8.4	7.95 - 8.45	8.2	5	41	1681	38.46
8.5 - 8.9	8.45 - 8.95	8.7	1	8.7	75.69	7.692
			13	102	3119.74	100

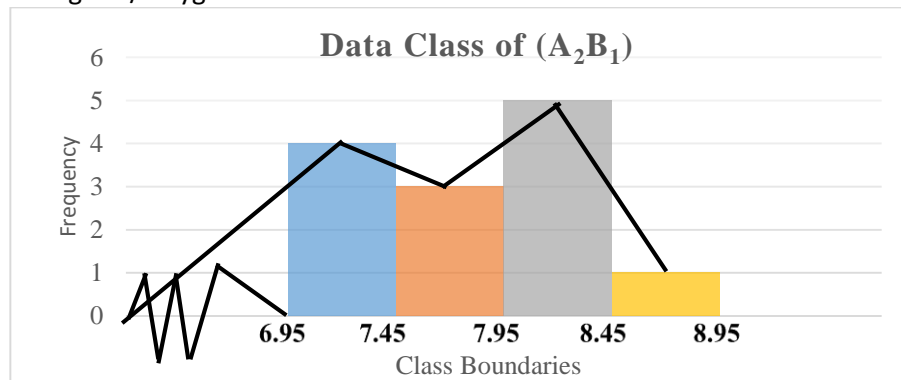
6. Mean $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{102}{13} = 7.84$

7. Mo = $L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 7.95 + 0.5 \left\{ \frac{2}{2+4} \right\} = 8.11$

8. Me = $L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 7.45 + 0.5 \left\{ \frac{\frac{13}{2} - 4}{3} \right\} = 7.86$

9. S = $\sqrt{\frac{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}{n - 1}} = \sqrt{\frac{3119.74 - \frac{(102)^2}{13}}{13 - 1}} = \sqrt{\frac{3119.74 - 800.30}{12}} = 13.90$

10. Histogram/Polygon

5. Data Class of Vocabra game (A₁B₂)

7 7 7.3 7.3 7.6 7.6 7.6 7.6 8 8.3 8.6 8.6 9

1. The highest score is 9
2. The lowest score is 7
3. Range is $9 - 7 = 2$
4. The number of classes is $1 + (3.3) \log 13 = 4.67$ (4 is used)
5. The class width (interval) $= \frac{2}{4} = 0.5$ (0.5 is used)

Class Limit	Class Boundaries	Mid point (X _i)	Freq (F _i)	F _i X _i	(F _i X _i) ²	Percentage
7 - 7.4	6.95 - 7.45	7.2	4	28.8	829.44	30.77
7.5 - 7.9	7.45 - 7.95	7.7	4	30.8	948.64	30.77
8 - 8.4	7.95 - 8.45	8.2	2	16.4	268.96	15.38
8.5 - 9	8.45 - 9.05	8.75	3	26.3	689.0625	23.08
			13	102	2736.103	100

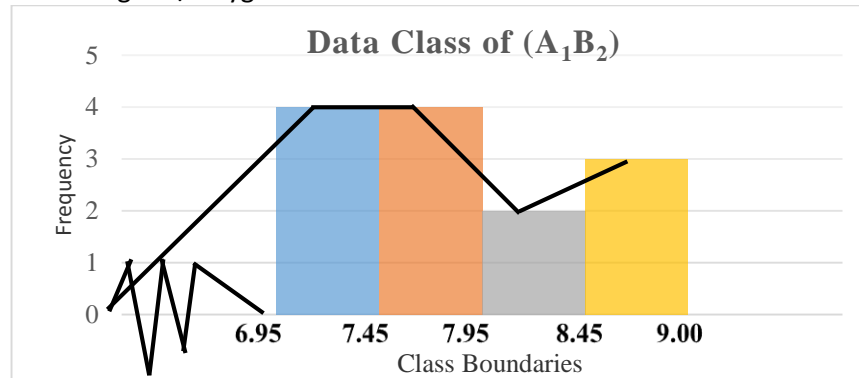
$$6. \text{ Mean } \bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{102}{13} = 7.84$$

$$7. \text{ Mo} = L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 7.45 + 0.5 \left\{ \frac{0}{0+2} \right\} = 7.95$$

$$8. \text{ Me} = L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 7.45 + 0.5 \left\{ \frac{\frac{13}{2} - 4}{4} \right\} = 7.76$$

$$9. S = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n-1} = \sqrt{\frac{2736.10 - \frac{(102)^2}{13}}{13-1}} = \sqrt{\frac{2736.10 - 800.30}{12}} = 12.70$$

6. 10. Histogram/Polygon



7.

8. Data Class of Vocabra game (A₂B₂)

7.6 7.6 8 8.3 8.3 8.6 9 9 9 9 9.3 9.3 9.3

1. The highest score is 9.3
2. The lowest score is 7.6
3. Range is $9.3 - 7.6 = 1.7$
4. The number of classes is $1 + (3.3) \log 13 = 4.67$ (4 is used)
5. The class width (interval) $= \frac{1.7}{4} = 0.42$ (0.5 is used)

Class Limit	Class Boundaries	Mid point (X _i)	Freq (F _i)	F _i X _i	(F _i X _i) ²	Percentage
7.6 - 8	7.55 - 8.05	7.8	3	23.4	547.56	23.08
8.1 - 8.5	8.05 - 8.55	8.3	2	16.6	275.56	15.38
8.6 - 9	8.55 - 9.05	8.8	5	44	1936	38.46
9.1 - 9.5	9.05 - 9.55	9.3	3	27.9	778.41	23.08
			13	112	3537.53	100

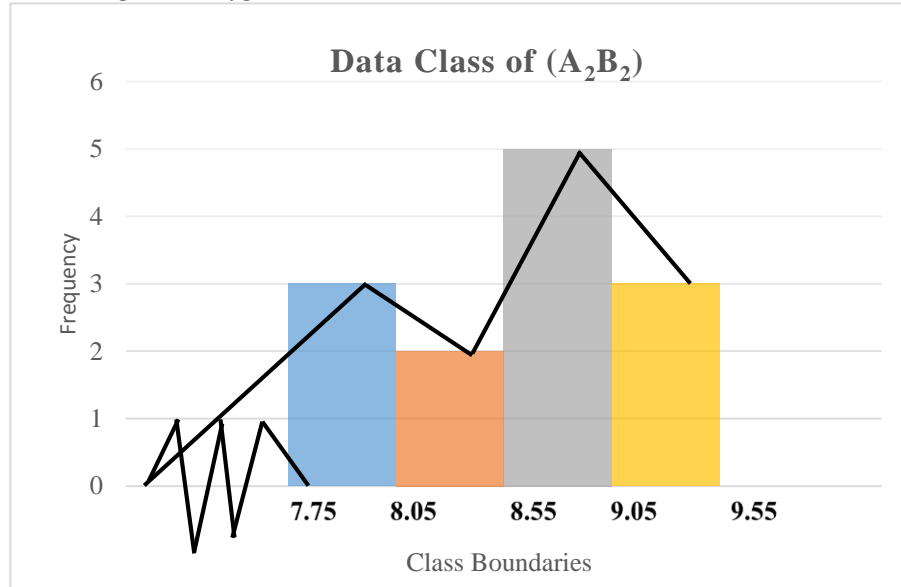
6. Mean $\bar{x} = \frac{\sum f_i x_i}{\sum f_i} = \frac{112}{13} = 8.61$

7. Mo $= L + i \left\{ \frac{f_1}{f_1 + f_2} \right\} = 8.55 + 0.5 \left\{ \frac{3}{3+2} \right\} = 8.85$

8. Me $= L + i \left\{ \frac{N/2 - cfb}{fw} \right\} = 8.55 + 0.5 \left\{ \frac{\frac{13}{2} - 5}{5} \right\} = 8.70$

$$9.5 = \frac{\sqrt{\sum f_i X_i^2 - \frac{(\sum f_i X_i)^2}{n}}}{n-1} = \sqrt{\frac{3537.53 - \frac{(112)^2}{13}}{13-1}} = \sqrt{\frac{3537.53 - 964.92}{12}} = 14.64$$

10. Histogram/Polygon



Appendix 17. The Computation of Normality

1. The students who were taught by using Vocabra game (A₁)

No	X_i	X_i^2	z_i	Z-Table	F(z_i)	s(z_i)	F(z_i)-s(z_i)
1	7	49	-1.6	0.4505	0.0495	0.038462	0.0110385
2	7	49	-1.6	0.4505	0.0495	0.038462	0.0110385
3	7.3	53.29	-1.32	0.4115	0.0885	0.076923	0.0115769
4	7.3	53.29	-1.32	0.4115	0.0885	0.076923	0.0115769
5	7.6	57.76	-1.04	0.3531	0.1469	0.115385	0.0315154
6	7.6	57.76	-1.04	0.3531	0.1469	0.115385	0.0315154
7	7.6	57.76	-1.04	0.3531	0.1469	0.115385	0.0315154
8	7.6	57.76	-1.04	0.3531	0.1469	0.115385	0.0315154
9	8	64	-0.67	0.2734	0.2266	0.153846	0.0727538
10	8.3	68.89	-0.4	0.1736	0.3264	0.192308	0.1340923
11	8.6	73.96	-0.12	0.0987	0.4013	0.25	0.1513
12	8.6	73.96	-0.12	0.0987	0.4013	0.25	0.1513
13	9	81	0.248	0.1368	0.3632	0.269231	0.0939692
14	9	81	0.248	0.1368	0.3632	0.269231	0.0939692
15	9	81	0.248	0.1368	0.3632	0.269231	0.0939692
16	9	81	0.248	0.1368	0.3632	0.269231	0.0939692
17	9.3	86.49	0.525	0.2088	0.2912	0.307692	0.0164923
18	9.6	92.16	0.802	0.3023	0.1977	0.346154	0.1484538
19	9.6	92.16	0.802	0.3023	0.1977	0.346154	0.1484538
20	10	100	1.171	0.3749	0.8749	1	0.1251
21	10	100	1.171	0.3749	0.8749	1	0.1251
22	10	100	1.171	0.3749	0.8749	1	0.1251
23	10	100	1.171	0.3749	0.8749	1	0.1251
24	10	100	1.171	0.3749	0.8749	1	0.1251
25	10	100	1.171	0.3749	0.8749	1	0.1251
26	10	100	1.171	0.3749	0.8749	1	0.1251
$\sum X_i$	227	2011.24					
\bar{X}	8.7308					L_o	0.151
SD	1.08361					L_t	0.161
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.151 and L_t is 0.161. Because L_o is lower than L_t ($0.151 < 0.161$), it can be concluded that the sample is in normal distribution.

2. The students who were taught by using Crossword game (A_2)

No	X_i	X_i^2	z_i	Z-Table	$F(z_i)$	$s(z_i)$	$ F(z_i)-s(z_i) $
1	7	49	-1.68	0.4599	0.0401	0.038462	0.0016385
2	7	49	-1.68	0.4599	0.0401	0.038462	0.0016385
3	7.3	53.29	-1.27	0.4115	0.0885	0.115385	0.0268846
4	7.3	53.29	-1.27	0.4115	0.0885	0.115385	0.0268846
5	7.6	57.76	-0.85	0.3023	0.1977	0.192308	0.0053923
6	7.6	57.76	-0.85	0.3023	0.1977	0.192308	0.0053923
7	7.6	57.76	-0.85	0.3023	0.1977	0.192308	0.0053923
8	7.6	57.76	-0.85	0.3023	0.1977	0.192308	0.0053923
9	7.6	57.76	-0.85	0.3023	0.1977	0.192308	0.0053923
10	8	64	-0.29	0.1368	0.3632	0.269231	0.0939692
11	8	64	-0.29	0.1368	0.3632	0.269231	0.0939692
12	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
13	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
14	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
15	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
16	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
17	8.3	68.89	0.123	0.0596	0.4404	0.346154	0.0942462
18	8.6	73.96	0.54	0.2088	0.2912	0.423077	0.1318769
19	8.6	73.96	0.54	0.2088	0.2912	0.423077	0.1318769
20	9	81	1.096	0.3531	0.545408	0.692308	0.1469
21	9	81	1.096	0.3531	0.545408	0.692308	0.1469
22	9	81	1.096	0.3531	0.545408	0.692308	0.1469
23	9	81	1.096	0.3531	0.545408	0.692308	0.1469
24	9.3	86.49	1.513	0.4394	0.9394	1	0.0606
25	9.3	86.49	1.513	0.4394	0.9394	1	0.0606
26	9.3	86.49	1.513	0.4394	0.9394	1	0.0606
$\sum X_i$	213.5	1766.11					
\bar{X}	8.2115					L_o	0.146
SD	0.7196					L_t	0.161
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.146 and L_t is 0.161. Because L_o is lower than L_t ($0.146 < 0.161$), it can be concluded that the sample is in normal distribution.

3. The data of vocabulary test of the students having high motivation (B_1)

No	X_i	X_i^2	z_i	Z-Table	$F(z_i)$	$s(z_i)$	$ F(z_i)-s(z_i) $
1	7	49	-1.61	0.4505	0.0495	0.038462	0.0110385
2	7	49	-1.61	0.4505	0.0495	0.038462	0.0110385
3	7.3	53.29	-1.33	0.4115	0.0885	0.076923	0.0115769
4	7.3	53.29	-1.33	0.4115	0.0885	0.076923	0.0115769
5	7.6	57.76	-1.05	0.3944	0.1056	0.115385	0.0097846
6	7.6	57.76	-1.05	0.3944	0.1056	0.115385	0.0097846
7	7.6	57.76	-1.05	0.3944	0.1056	0.115385	0.0097846
8	8	64	-0.67	0.2422	0.2578	0.153846	0.1039538
9	8.3	68.89	-0.39	0.1736	0.3264	0.192308	0.1340923
10	8.3	68.89	-0.39	0.1736	0.3264	0.192308	0.1340923
11	8.3	68.89	-0.39	0.1736	0.3264	0.192308	0.1340923
12	8.3	68.89	-0.39	0.1736	0.3264	0.192308	0.1340923
13	8.6	73.96	-0.11	0.0987	0.4013	0.25	0.1513
14	9	81	0.263	0.1368	0.3632	0.269231	0.0939692
15	9	81	0.263	0.1368	0.3632	0.269231	0.0939692
16	9	81	0.263	0.1368	0.3632	0.269231	0.0939692
17	9.3	86.49	0.544	0.2088	0.2912	0.307692	0.0164923
18	9.6	92.16	0.824	0.3023	0.1977	0.346154	0.1484538
19	9.6	92.16	0.824	0.3023	0.1977	0.346154	0.1484538
20	10	100	1.199	0.3944	0.8944	1	0.1056
21	10	100	1.199	0.3749	0.8749	1	0.1251
22	10	100	1.199	0.3749	0.8749	1	0.1251
23	10	100	1.199	0.3749	0.8749	1	0.1251
24	10	100	1.199	0.3749	0.8749	1	0.1251
25	10	100	1.199	0.3749	0.8749	1	0.1251
26	10	100	1.199	0.3749	0.8749	1	0.1251
$\sum X_i$	226.7	2005.19					
\bar{X}	8.7192					L_o	0.151
SD	1.0685					L_t	0.161
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.151 and L_t is 0.161. Because L_o is lower than L_t ($0.151 < 0.161$), it can be concluded that the sample is in normal distribution.

4. The data of vocabulary test of the students having low motivation (B_2)

No	X_i	X_i^2	z_i	Z-Table	$F(z_i)$	$s(z_i)$	$ F(z_i)-s(z_i) $
1	7	49	-1.63	0.4505	0.0495	0.038462	0.0110385
2	7	49	-1.63	0.4505	0.0495	0.038462	0.0110385
3	7.3	53.29	-1.23	0.3944	0.1056	0.076923	0.0286769
4	7.3	53.29	-1.23	0.3944	0.1056	0.076923	0.0286769
5	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
6	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
7	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
8	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
9	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
10	7.6	57.76	-0.83	0.3023	0.1977	0.153846	0.0438538
11	8	64	-0.3	0.1368	0.3632	0.230769	0.1324308
12	8	64	-0.3	0.1368	0.3632	0.230769	0.1324308
13	8.3	68.89	0.103	0.0596	0.4404	0.307692	0.1327077
14	8.3	68.89	0.103	0.0596	0.4404	0.307692	0.1327077
15	8.3	68.89	0.103	0.0596	0.4404	0.307692	0.1327077
16	8.6	73.96	0.502	0.2088	0.2912	0.423077	0.1318769
17	8.6	73.96	0.502	0.2088	0.2912	0.423077	0.1318769
18	8.6	73.96	0.502	0.2088	0.2912	0.423077	0.1318769
19	9	81	1.036	0.3531	0.430023	0.576923	0.1469
20	9	81	1.036	0.3531	0.430023	0.576923	0.1469
21	9	81	1.036	0.3531	0.430023	0.576923	0.1469
22	9	81	1.036	0.3531	0.430023	0.576923	0.1469
23	9	81	1.036	0.3531	0.430023	0.576923	0.1469
24	9.3	86.49	1.436	0.4265	0.9265	1	0.0735
25	9.3	86.49	1.436	0.4265	0.9265	1	0.0735
26	9.3	86.49	1.436	0.4265	0.9265	1	0.0735
$\sum X_i$	213.8	1772.16					
\bar{X}	8.2231					L_o	0.146
SD	0.7501					L_t	0.161
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.146 and L_t is 0.161. Because L_o is lower than L_t ($0.146 < 0.161$), it can be concluded that the sample is in normal distribution.

5. The data of vocabulary test of A_1B_1

No	X_i	X_i^2	z_i	Z-Table	$F(z_i)$	$s(z_i)$	$ F(z_i)-s(z_i) $
1	9	81	-1.51	0.4394	0.0606	0.076923	0.0163231
2	9	81	-1.51	0.4394	0.0606	0.076923	0.0163231
3	9	81	-1.51	0.4394	0.0606	0.076923	0.0163231
4	9.3	86.49	-0.82	0.3023	0.1977	0.307692	0.1099923
5	9.6	92.16	-0.12	0.0596	0.4404	0.615385	0.1749846
6	9.6	92.16	-0.12	0.0596	0.4404	0.615385	0.1749846
7	10	100	0.799	0.3023	0.8023	1	0.1977
8	10	100	0.799	0.3023	0.8023	1	0.1977
9	10	100	0.799	0.3023	0.8023	1	0.1977
10	10	100	0.799	0.3023	0.8023	1	0.1977
11	10	100	0.799	0.3023	0.8023	1	0.1977
12	10	100	0.799	0.3023	0.8023	1	0.1977
13	10	100	0.799	0.3023	0.8023	1	0.1977
$\sum X_i$	125.5	1213.81					
\bar{X}	9.6538					L_o	0.1977
SD	0.4332					L_t	0.234
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.1977 and L_t is 0.234. Because L_o is lower than L_t ($0.1977 < 0.234$), it can be concluded that the sample is in normal distribution.

6. The data of vocabulary test of A₂B₁

No	X _i	X _i ²	z _i	Z-Table	F(z _i)	s(z _i)	F(z _i)-s(z _i)
1	7	49	-1.44	0.4265	0.0735	0.076923	0.0034231
2	7	49	-1.44	0.4265	0.0735	0.076923	0.0034231
3	7.3	53.29	-0.89	0.3289	0.1711	0.230769	0.0596692
4	7.3	53.29	-0.89	0.3289	0.1711	0.230769	0.0596692
5	7.6	57.76	-0.34	0.1368	0.3632	0.384615	0.0214154
6	7.6	57.76	-0.34	0.1368	0.3632	0.384615	0.0214154
7	7.6	57.76	-0.34	0.1368	0.3632	0.384615	0.0214154
8	8	64	0.395	0.1736	0.3264	0.538462	0.2120615
9	8.3	68.89	0.944	0.3289	0.444285	0.615385	0.1711
10	8.3	68.89	0.944	0.3289	0.444285	0.615385	0.1711
11	8.3	68.89	0.944	0.3289	0.444285	0.615385	0.1711
12	8.3	68.89	0.944	0.3289	0.444285	0.615385	0.1711
13	8.6	73.96	1.493	0.4394	0.9394	1	0.0606
$\sum X_i$	101.2	791.38					
\bar{X}	7.7846					L_o	0.212
SD	0.546					L_t	0.234
						L_o < L_t	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.212 and L_t is 0.234. Because L_o is lower than L_t ($0.212 < 0.234$), it can be concluded that the sample is in normal distribution.

7. The data of vocabulary test of A_1B_2

No	X_i	X_i^2	z_i	Z-Table	$F(z_i)$	$s(z_i)$	$ F(z_i)-s(z_i) $
1	7	49	-1.26	0.4115	0.0885	0.076923	0.0115769
2	7	49	-1.26	0.4115	0.0885	0.076923	0.0115769
3	7.3	53.29	-0.79	0.3023	0.1977	0.230769	0.0330692
4	7.3	53.29	-0.79	0.3023	0.1977	0.230769	0.0330692
5	7.6	57.76	-0.32	0.1368	0.3632	0.384615	0.0214154
6	7.6	57.76	-0.32	0.1368	0.3632	0.384615	0.0214154
7	7.6	57.76	-0.32	0.1368	0.3632	0.384615	0.0214154
8	7.6	57.76	-0.32	0.1368	0.3632	0.384615	0.0214154
9	8	64	0.299	0.1368	0.3632	0.538462	0.1752615
10	8.3	68.89	0.767	0.3023	0.494608	0.692308	0.1977
11	8.6	73.96	1.234	0.3944	0.740554	0.846154	0.1056
12	8.6	73.96	1.234	0.3944	0.740554	0.846154	0.1056
13	9	81	1.857	0.4744	0.9744	1	0.0256
$\sum X_i$	101.5	797.43					
\bar{X}	7.8077					L_o	0.197
SD	0.64221					L_t	0.234
						$L_o < L_t$	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.197 and L_t is 0.234. Because L_o is lower than L_t ($0.197 < 0.234$), it can be concluded that the sample is in normal distribution.

8. The data of vocabulary test of A₂B₂

No	X _i	X _i ²	z _i	Z-Table	F(z _i)	s(z _i)	F(z _i)-s(z _i)
1	7.6	57.76	-1.62	0.4505	0.0495	0.076923	0.0274231
2	7.6	57.76	-1.62	0.4505	0.0495	0.076923	0.0274231
3	8	64	-0.99	0.3531	0.1469	0.153846	0.0069462
4	8.3	68.89	-0.53	0.2088	0.2912	0.307692	0.0164923
5	8.3	68.89	-0.53	0.2088	0.2912	0.307692	0.0164923
6	8.6	73.96	-0.06	0.0596	0.4404	0.384615	0.0557846
7	9	81	0.563	0.2088	0.2912	0.461538	0.1703385
8	9	81	0.563	0.2088	0.2912	0.461538	0.1703385
9	9	81	0.563	0.2088	0.2912	0.461538	0.1703385
10	9	81	0.563	0.2088	0.2912	0.461538	0.1703385
11	9.3	86.49	1.03	0.3531	0.8531	1	0.1469
12	9.3	86.49	1.03	0.3531	0.8531	1	0.1469
13	9.3	86.49	1.03	0.3531	0.8531	1	0.1469
ΣX _i	112.3	974.73					
\bar{X}	8.6385					L_o	0.17
SD	0.6212					L_t	0.234
						L_o < L_t	Normal

The highest value of $|F(z_i)-s(z_i)|$ is 0.170 and L_t is 0.234. Because L_o is lower than L_t (0.170) < (0.234), it can be concluded that the sample is in normal distribution.

Appendix 18. The Data of Homogeneity

No	X_1	X_2	X_3	X_4	X_1^2	X_2^2	X_3^2	X_4^2
1	10	8	7.6	7.6	100	64	57.76	57.76
2	9.6	7.6	7.6	8.6	92.16	57.76	57.76	73.96
3	9.6	8.3	8	8.3	92.16	68.89	64	68.89
4	10	7.6	8.3	9	100	57.76	68.89	81
5	10	8.3	8.6	8.3	100	68.89	73.96	68.89
6	9	8.3	7	9	81	68.89	49	81
7	9	8.3	7.6	9	81	68.89	57.76	81
8	9	7	8.6	9	81	49	73.96	81
9	10	7.6	7	9.3	100	57.76	49	86.49
10	10	7.3	7.3	9.3	100	53.29	53.29	86.49
11	9.3	7.3	7.3	8	86.49	53.29	53.29	64
12	10	8.6	7.6	9.3	100	73.96	57.76	86.49
13	10	7	9	7.6	100	49	81	57.76
	125.5	101.2	101.5	112.3	1213.81	791.38	797.43	974.73
	9.654	7.785	7.808	8.638				
Statistic	Media/Motivation				A_1	A_2	Sum	
n	B_1				13	13	26	
$\sum X_i$					125.5	101.2	226.7	
$\sum X_i^2$					1213.81	791.38	2005.19	
\bar{X}					9.65	7.78	8.71	
n	B_2				13	13	26	
$\sum X_i$					101.5	112.3	213.8	
$\sum X_i^2$					797.43	974.73	1772.16	
\bar{X}					7.8	8.63	8.22	
n	Sum				26	26	52	
$\sum X_i$					227	213.5	440.5	
$\sum X_i^2$					2011.24	1766.11	3777.35	
\bar{X}					8.73	8.21	8.47	

The Result of Homogeneity

$$a) S_1^2 = \frac{\sum x_1^2 - \frac{(\sum x_1)^2}{n}}{n-1} = \frac{1213.81 - \frac{(125.5)^2}{n}}{n-1} = \frac{1213.81 - 1211.55}{12} = 0.19$$

$$b) S_2^2 = \frac{\sum x_2^2 - \frac{(\sum x_2)^2}{n}}{n-1} = \frac{791.38 - \frac{(101.2)^2}{n}}{n-1} = \frac{791.38 - 787.80}{12} = 0.3$$

$$c) S_3^2 = \frac{\sum x_3^2 - \frac{(\sum x_3)^2}{n}}{n-1} = \frac{797.43 - \frac{(101.5)^2}{n}}{n-1} = \frac{797.43 - 792.48}{12} = 0.41$$

$$d) S_4^2 = \frac{\sum x_4^2 - \frac{(\sum x_4)^2}{n}}{n-1} = \frac{974.73 - \frac{(112.3)^2}{n}}{n-1} = \frac{974.73 - 970.09}{12} = 0.39$$

$$e) S^2 = \left\{ \sum (n_i - 1) S_i^2 / \sum (n_i - 1) \right\} = \frac{(12 \times 0.19) + (12 \times 0.3) + (12 \times 0.41) + (12 \times 0.39)}{(12 + 12 + 12 + 12)} \\ = \frac{15.24}{48} = 0.32$$

$$\sum \log (s_i) (n - 1) = (\log 0.19 \times 12) + (\log 0.3 \times 12) + (\log 0.41 \times 12) + (\log 0.39 \times 12) \\ = -24.60$$

$$f) \log S^2 = \log 0.32 = -0.49$$

$$g) B = (\log s^2) \sum (n_i - 1) \\ = -0.49 \times 48 \\ = -23.7$$

sample	df	$\frac{1}{df}$	S_i^2	$\log S_i^2$	$(df) \log S_i^2$
A ₁ B ₁	12	0.0833	0.19	-0.72655	-8.718642
A ₂ B ₁	12	0.0833	0.3	-0.52567	-6.30806
A ₁ B ₂	12	0.0833	0.41	-0.38464	-4.615723
A ₂ B ₂	12	0.0833	0.39	-0.41353	-4.962337
	48		0.32		-24.60476

$$h) \chi_o^2 = (\ln 10) \{ B - \sum (n_i - 1) \log s_i^2 \} \\ = 2.303 (-23.7 + 24.60) \\ = 2.303 (0.91866) \\ = 2.115$$

Based on the result of calculation above, χ_o^2 (2.115) is lower than χ_t^2 at the level of significance (α) 0.05 (7.815). Because $\chi_o^2 < \chi_t^2$ (2.115 < 7.815), the sample is homogeneous.

Appendix 19. The Computation of Anova 2x2 (Hypothesis Test)

Statistic	Media/Motivation	A ₁	A ₂	Sum
n	B ₁	13	13	26
$\sum X_i$		125.5	101.2	226.7
$\sum X_i^2$		1213.81	791.38	2005.19
\bar{X}		9.65	7.78	8.71
n	B ₂	13	13	26
$\sum X_i$		101.5	112.3	213.8
$\sum X_i^2$		797.43	974.73	1772.16
\bar{X}		7.8	8.63	8.22
n	Sum	26	26	52
$\sum X_i$		227	213.5	440.5
$\sum X_i^2$		2011.24	1766.11	3777.35
\bar{X}		8.73	8.21	8.47

a. The total sum of squares:

$$\begin{aligned}
 \sum x_t^2 &= \sum X_t^2 - \frac{\sum X_t^2}{N} \\
 &= 3777.35 - \frac{(440.5)^2}{52} \\
 &= 3777.35 - 3731.54 \\
 &= 45.81
 \end{aligned}$$

b. The sum of squares within groups.

$$\begin{aligned}
 \sum x_b^2 &= \frac{X_1^2}{n_1} + \frac{X_2^2}{n_2} + \frac{X_3^2}{n_3} + \frac{X_4^2}{n_4} - \frac{X_t^2}{N} \\
 &= \sum \left[\frac{(125.5)^2}{13} + \frac{(101.2)^2}{13} + \frac{(101.5)^2}{13} + \frac{(112.3)^2}{13} \right] - \frac{(440.5)^2}{52} \\
 &= 3761.92 - 3731.54 \\
 &= 30.4
 \end{aligned}$$

c. The sum of squares within groups:

$$\begin{aligned}\sum x_w^2 &= \sum x_t^2 - \sum x_b^2 \\ &= 45.81 - 30.38 \\ &= 15.41\end{aligned}$$

d. The between-columns sum of scores:

$$\begin{aligned}\sum x_{bc}^2 &= \frac{\sum x_{c1}^2}{n_{c1}} + \frac{\sum x_{c2}^2}{n_{c2}} - \frac{\sum x_t^2}{N} \\ &= \sum \left[\frac{(226.7)^2}{26} + \frac{(213.8)^2}{26} \right] - \frac{(440.5)^2}{52} \\ &= 3734.73 - 3731.54 \\ &= 3.2\end{aligned}$$

e. The between-rows sum of scores:

$$\begin{aligned}\sum x_{br}^2 &= \frac{\sum x_{r1}^2}{n_{r1}} + \frac{\sum x_{r2}^2}{n_{r2}} - \frac{\sum x_t^2}{N} \\ &= \sum \left[\frac{(227)^2}{26} + \frac{(213.5)^2}{26} \right] - \frac{(440.5)^2}{52} \\ &= 3735.04 - 3731.54 \\ &= 3.50\end{aligned}$$

f. The sum of squares interaction:

$$\begin{aligned}\sum x_{int} &= \sum x_b^2 - \sum x_{bc}^2 + \sum x_{br}^2 \\ &= 30.4 - (3.2 + 3.50) \\ &= 30.4 - 6.7 \\ &= 23.69\end{aligned}$$

g. The number of degrees of freedom associated with each source of variation:

$$\begin{aligned}\text{dfc for between-column sum of squares} &= C-1 = 2 - 1 = 1 \\ \text{dfr for between-rows sum of squares} &= R-1 = 2 - 1 = 1 \\ \text{dfrc for interaction} &= (C-1)(R-1) = (1 \times 1) = 1 \\ \text{dfb for between-groups sum of squares} &= G-1 (C + R) - 1 = 4 - 1 = 3\end{aligned}$$

$$\text{dfi for within-groups sum of squares} = \sum(n - 1) = 12 + 12 + 12 + 12 = 48$$

$$\text{dft for total sum of squares} = N - 1 = 52 - 1 = 51$$

h. Mean Square

$$\text{MS groups} = \frac{\sum x_b^2}{dfb} = \frac{30.4}{3} = 10.13$$

$$\text{MS within groups} = \frac{\sum x_w^2}{dfi} = \frac{15.41}{48} = 0.321$$

$$\text{MS column} = \frac{\sum x_{bc}^2}{dfc} = \frac{3.2}{1} = 3.2$$

$$\text{MS rows} = \frac{\sum x_{br}^2}{dfr} = \frac{3.50}{1} = 3.50$$

$$\text{MS interaction} = \frac{\sum x_{int}^2}{dfrc} = \frac{23.69}{1} = 23.69$$

i. F Anova

$$\text{F Column} = \frac{\text{MS columns}}{\text{MS within groups}} = \frac{3.2}{0.321} = 9.96$$

$$\text{F Rows} = \frac{\text{MS rows}}{\text{MS within groups}} = \frac{3.50}{0.321} = 10.90$$

$$\text{Frc} = \frac{\text{MS interaction}}{\text{MS within groups}} = \frac{23.69}{0.321} = 73.79$$

j. Result

Source of variance	SS	df	MS	F _o	F _t (0.05)	
Between columns	3.2	1	3.2	9.968	4	significant
Between rows	3.5	1	3.5	10.902	4	significant
Columns by rows (interaction)	23.69	1	23.69	73.791	4	significant
Between group	45.81	3	10.13			
Within group	30.4	48	0.321			
Total	15.41	51				
				F _o > F _t =		significant

Hypothesis Test Result

1. Because F_o between columns (9.968) is higher than F_t (4.00) at the level of significance $\alpha = 0.05$, H_o is rejected and the difference between columns is significant. It can be concluded that the media of vocabulary differ significantly from one another in their effect on the performance of the subject in experiment.
2. Because F_o between rowss (10.902) is higher than F_t (4.00) at the level of significance $\alpha = 0.05$, H_o is rejected and the difference between rows is significant. It can be concluded that the students having high and those having low motivation are significantly different.
3. Because F_o columns by rows (73.791) is higher than F_t (4.00) at the level of significance $\alpha = 0.05$, H_o is rejected and there is an interaction effect between the two variables, teaching media and motivation. It means that the effect of teaching media and the students' vocabulary mastery depend on the level of motivation.

Appendix 20. The Computation of Tuckey Test

1. Comparing two means from two groups (A₁ and A₂)

Vocabra Games is compared to Crossword Games (between columns)

$$\begin{aligned}
 q &= \frac{\bar{X}c_1 - \bar{X}c_2}{\sqrt{\text{Error variance}/n}} \\
 &= \frac{8.73 - 8.21}{\sqrt{0.321/26}} \\
 &= \frac{0.52}{0.111} \\
 &= 4.68
 \end{aligned}$$

From the result above, it can be concluded that q_o (4.68) is higher than q_t (2.89).

2. Comparing two means from two groups (B₁ and B₂)

Students having high motivation are compared to students having low motivation (between rows)

$$\begin{aligned}
 q &= \frac{\bar{X}r_1 - \bar{X}r_2}{\sqrt{\text{Error variance}/n}} \\
 &= \frac{8.71 - 8.22}{\sqrt{0.321/26}} \\
 &= \frac{0.49}{0.111} \\
 &= 4.41
 \end{aligned}$$

From the result above, it can be concluded that q_o (4.41) is higher than q_t (2.89).

3. Comparing two means between A₁B₁ and A₂B₁

Vocabra Games is compared to Crossword Games for students having high motivation

$$q = \frac{\bar{X}c_1r_1 - \bar{X}c_2r_1}{\sqrt{\text{Error variance}/n}}$$

$$= \frac{9.65 - 7.78}{\sqrt{0.321/13}}$$

$$= \frac{1.87}{0.157}$$

$$= 11.9$$

From the result above, it can be concluded that q_o (11.9) is higher than q_t (3.06).

4. Comparing two means between A_1B_2 and A_2B_2

Vocabra games is compared to Crossword Game for students having low motivation

$$q = \frac{\bar{X}c_2r_1 - \bar{X}c_1r_2}{\sqrt{\text{Error variance}/n}}$$

$$= \frac{8.63 - 7.80}{\sqrt{0.321/13}}$$

$$= \frac{0.83}{0.157}$$

$$= 5.28$$

From the result above, it can be concluded that q_o (5.28) is higher than q_t (3.06).

The analysis result of the computation q_o is compared to q_t , if $q_o > q_t$, the difference is significant; and to know which one is better, the means are compared.

Table summary of Tuckey Test

Between Group	q_o	q_t (0.05)	Meaning
$q_1 (A_1 - A_2)$	4.68	2.89	significant
$q_2 (B_1 - B_2)$	4.41	2.89	significant
$q_3 (A_1B_1 - A_2B_1)$	11.9	3.06	significant
$q_4 (A_2B_2 - A_1B_2)$	5.282	3.06	significant
$q_o > q_t = \text{significant}$			

